

Manufacturers Record

Exponent of America



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Baltimore, Md.
MARCH 29, 1923

A Call To The Nation.

National Association of Manufacturers
829 Stahlman Building, Nashville, Tenn.
J. E. Edgerton, President.



Editor Manufacturers Record:

There is no source of commendation which I value more than you, because I have the strongest confidence in not only your ability to appraise values but in your entire sincerity and spirit of helpfulness. Your letter of January 20 is therefore very pleasing to me, and I am grateful for the compliment of your consideration.

I feel with you that the most important issue of this hour is that of the preservation of law and order and a proper regard for our American institutions. It makes no difference under what guise or pretense or name lawlessness may manifest itself, it cheapens the life and property right of every individual citizen in the nation. It is just as wrong to murder a union man as it is to murder a non-union man, and no decent citizen will draw distinctions in his attitude of disapproval. The mob at Harrison is just as culpable as the mob at Herrin.

It was never so necessary as now for high-minded citizens to speak and act as boldly and courageously in defense of American institutions as it is today. The chief enemies to the restoration of tranquillity throughout the world, and to the stabilization of conditions, are hatred, prejudice, revenge and greed, which are manifesting themselves in international relations and in relations between classes, races and sects. At some points there is entirely too much tolerance, and at others there is too much of hateful intolerance. Only the gospel of Love, which was preached by the Prince of Peace, and only the principles which were embodied in His life, will save America and the world. No League of Nations nor any other compact or instrument of understanding will hold against the destructive influences of evil, except they be founded upon the solid truths enunciated by the Savior of mankind, and are permeated by the spirit of brotherly love that He proclaimed.

So far as I can it shall be my constant endeavor to make these things realities in the life of our nation. It is the common task of right-thinking men.

With every good wish, I am,

Most sincerely,

J. E. Edgerton, President.

A Dead Loss to Industry

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This estimate was made by the Forest Products Industrial Research Laboratory maintained by the United States Department of Agriculture in co-operation with the University of Wisconsin.

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Manufacturers Record

Exponent of America

MARCH 29, 1923



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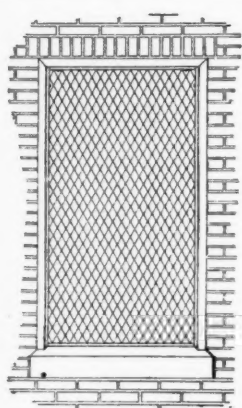
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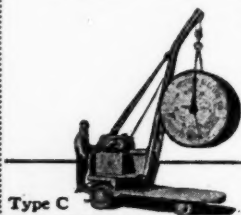
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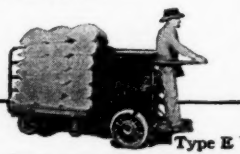
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Manufacturers Record

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of the South and Southwest as the Nation's Greatest Material Asset

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PRESIDENT HARDING URGED TO MAKE NO EFFORT TO BREAK DOWN PRICES, WHICH WOULD DESTROY PROSPERITY.

THE editor of the MANUFACTURERS RECORD has wired to President Harding as follows:

"Dispatches from Washington today report that you and some members of your cabinet are considering postponing all government construction work on the ground that prices are too high and that the government will wait for lower prices. I sincerely trust that this report is erroneous.

"The breakdown of prices in 1920 by the power of governmental influences and drastic deflation of banking credits for that purpose, brought chaos to the business interests of the country, drove into poverty millions of farmers and thousands of business men in every line of activity. The cry which then went forth from the government and from bankers that prices were too high was responsible for the discontinuance of building operations and for the destruction of prices of agricultural products, all uniting to result in throwing out of employment 5,000,000 men.

"Scarcely more than a year ago the railroads had about 500,000 idle freight cars, farmers everywhere were in desperate poverty and hundreds of thousands of them were on the verge of bankruptcy. The iron and steel output was at the lowest ebb in the history of the country in proportion to capacity, all due to the breakdown in prices. Un-

der the advancing prices of the last twelve months, brought about largely by a change of policy in Federal Reserve management and in freer banking credit, railroads are now burdened with more traffic than they can carry and as against 500,000 idle freight cars; farmers everywhere were stimulated by this wonderful change in their situation the railroads have been ordering more cars and locomotives than for the last six or seven years. The iron and steel works of the country are running at 85 to 90 per cent of capacity and this would be even greater but for the inability to secure transportation. Farmers are once more beginning to breathe a little freely. As the value of their products has been increasing they have been paying off many millions of indebtedness and hope and optimism have been sweeping over the land as against the despair and pessimism which existed so long as prices were low. Under low prices 5,000,000 people were out of employment while under higher prices the demand for labor exceeds the supply.

"No more powerful influence could be put into existence to change the prosperity of the hour back to the poverty of two years ago than an announcement that the Government would stop construction work on the ground that prices are too high. This would cause business men everywhere to halt in their construction activities. Once more millions of men would be thrown out of employment, once more a breakdown of prices would cover the land with a wail of poverty as against the joy of prosperity.

"It is to the rising prices of the last twelve or eighteen months that the prosperity of the present is due. This prosperity can be almost over night changed to poverty by any action of your administration in seeking to break down prices by halting construction work and thus creating a spirit of unrest and uncertainty throughout the land.

"I take the liberty therefore in behalf of the people of the country of all sections and all classes to express the earnest hope that your administration will not give voice to any effort to stop construction work on the part of the Government by reason of the advance in prices of building materials and of wages which has taken place in the last twelve months and I presume to make the prediction that if any effort is made by your administration or by any member of your cabinet with your approval, to break down prices it will result in the breakdown of prosperity which will once more cover the land with a pall of poverty."

While Mr. Hoover seems in his letter to the President to have emphasized the point that the business interests of the

country were so crowded with construction work that the Government should step aside, he also brings out that there has been an advance in the prices of construction materials since last year, and reading between the lines one is justified in interpreting the idea back of the whole movement that Mr. Hoover's advice is based on the increased cost of building work. It will be so interpreted by thousands of business men who will feel that if the Government is advised to stop construction work, whatever may be the plea given, they too will consider letting up in construction activities.

The Government work of building post offices, river and harbor work, and kindred activities, is just as essential to the welfare of the country as is the business construction work that is going on. There is less reason why the Government should stop construction work than there is why individuals should stop. It was for this reason that the MANUFACTURERS RECORD entered the vigorous protest in the telegram to President Harding because if once another effort is made to break down prices it could be very easily accomplished to the destruction of our prosperity.

Bearing directly on this situation is a decision of the Federal Reserve Board which, according to the Washington Post, puts a ban on further construction of reserve bank buildings by a resolution: "Until the present congestion in the building activities of the country is fairly relieved and the cost of building lowered, Federal Reserve banks should not add to the existing difficulties of the situation by carrying on any branch building operations other than those now in progress or for which contracts have already been entered into."

In referring to this the Washington Post said: "There were hints at the Board discussion yesterday which dealt with the possibility of a new era of expansion which some deemed likely to be hurtful to the general economic recovery ultimately. It appeared that fear existed in some minds of a too rapid expansion in general conditions which might lead to a period of inflation of a dangerous character. There was no reference to this, however, in the Board's formal statement, and the session at which the discussion took place was **behind closed doors.**"

It is not the part of the Federal Reserve Board to undertake by inflation or deflation to control the movement of trade and industry. Any attempt to do this is contrary to all good economic management. This point was strikingly stated by Hon. Reginald McKenna, formerly Chancellor of the Exchequer of Great Britain, in a statement which we published February 22, and in the course of which he said: "The continuance of a high rate or the adoption of any other method for the purpose of forcing down prices is bound to strangle trade and reduce output and must operate very unfairly upon the tax payer who is saddled with the burden of the national debts. If we look for a revival of trade, for more abundant revenue and for a reduction in taxation we must leave prices to take their own course, under the normal pressure of supply and demand. We must not interfere with the natural flow of trade by any restriction of existing producing power but must seek a general increase of wealth through a more abundant output."

Moreover, the statement from the Washington Post that

the meeting was held "behind closed doors" only serves to emphasize the point which this paper has repeatedly made that the meetings of the Reserve Board should be held in the open and that the secrecy which prevailed in the past should forever be done away with.

We trust that Governor Crissinger will use his utmost influence in the Board to see that there are no more secret meetings held and no more secret decisions reached. Open meetings and open discussion are essential to the saving of the Federal Reserve System from a rising wrath which would destroy that system if the secrecy of the past is maintained.

There is never prosperity under low prices. Prosperity and low prices, as Mr. Crissinger once said, cannot be bedfellows. Low prices mean poverty. Prosperity always brings higher prices.

Is the movement, fathered by Secretary Hoover and now apparently endorsed by the Federal Reserve Board, the beginning of another campaign to break down prices. It looks that way, and unless the public is given to understand immediately that there is no such intention on the part of the administration or of the Federal Reserve Board the great prosperity of the present will have to give way to decreasing activity and increasing unemployment.

Are Mr. Hoover and the Federal Reserve Board afraid of prosperity? Are their visions broad enough to help to create the machinery of transportation and finance to justify and sustain the vast work of development and building activity needed in this country, or will they attempt, as was done before, to break down prosperity to the point where present facilities will enable our trade to be more easily handled? Which do they want continued, prosperity or a new era of poverty?

The country must give such an immediate answer to this question as to make Washington heed its protest.

WORLD EXTENSION OF RADIO NEWS SERVICE.

SERVICE to 800 radio subscribers scattered throughout Germany is giving them daily news from America. This broadening of the scope of radio telephony interest, which is announced by the Department of Commerce at Washington under the caption "Commercial Broadcasting in Germany," is characteristic of the world movement that is drawing different countries into closer communication with each another.

"After four months of experimenting," says the announcement, "the Express Service Company, (Eildienst Gesellschaft), Berlin, has begun a daily service of financial and commercial news broadcasting to subscribers in various parts of Germany, according to a report to the Department of Commerce from Consul E. V. Richardson, Berlin. This company is financed by German capital and is purely a private undertaking. Having arranged with the national government for the use of the radio station at Koenigswusterhausen on a limited basis for a definite period, a regular service of financial news is received from the United States, Switzerland, Sweden and other countries via the high power station at Nauener, Germany.

"This information is broadcast immediately by radio telephone to subscribers of the company. These number at present about 800 and are mostly banks and industrial institu-

tions located in some 200 towns and cities. It is expected that New York quotations handled by this service will be available generally to subscribers within ten minutes of their dispatch from New York.

"Each subscriber rents from the company the necessary receiving apparatus, paying for the service itself an annual fee of 300,000 marks and for the apparatus an annual rental of approximately 200,000 marks (a total at the time of writing amounting to the equivalent of about \$24, American money.) There are 2½ hour schedules daily, beginning at 9.30 A. M. and 5 P. M. The Express Service Company is represented in New York by a large American news agency."

The advantages of direct radio communication are widely familiar so far as amusement and recreation are concerned, but this application of the radio to business is a new step forward in the extension of wireless telegraphy and telephony which is likely to be productive of impressive results as it gradually spreads throughout the world.

KILLING OUR POTASH INDUSTRY.

POTASH production from original sources declined in this country from 109,737 tons in 1919, valued at \$7,215,160. to 14,490 tons in 1921, valued at \$648,700, according to Government reports just issued. These returns show a decrease in quantity of 87 per cent and in value of 91 per cent.

During the war the Government realized the supreme necessity of development of the potash industry in this country to safeguard ourselves in time of war as well as in time of peace against the destructive power of foreign potash interests. There was then organized the United States Potash Producers' Association composed of men in various parts of the country who in many different ways were trying to develop a potash industry. Mr. Frederick W. Brown, the Executive Secretary of the Association, now writes the MANUFACTURERS RECORD:

"Potash production in America has been so reduced by the failure of the tariff act to give us any protection that it is probable this association will be dissolved in the near future."

The dissolution of this organization would be a disaster to the country, and we trust that however discouraging may be its condition through the unpardonable blunder largely of Southern Congressmen in defeating the tariff on potash, the men interested in this industry will hold together and continue their work in behalf of arousing the people of this country to the need of the development through a protective tariff of our potash potentialities.

It is almost criminal folly for this country to leave itself at the mercy of Germany or other foreign potash producers when it could by a fair degree of protection for a few years create at home a potash industry which would give us an ample supply for our needs. During the war the Government encouraged our people to invest millions in experimental work in this industry. It persuaded cement manufacturers to produce potash as a by-product. It stimulated others to open up potash potentialities in the West and on the Pacific Coast. But disregarding the fact that the nation's honor was practically back of these efforts, no sooner was the war over than the successful efforts of the German potash producers caused a propaganda against the American industry to sweep over the land. Men who ought to have had more honor and integrity and a larger degree of patriotism, and other men who ought to have had more intelligence than to be caught by this German propaganda, fell into the trap set by the German potash interests and walked blindly into their scheme. Never did the spider spin a web for the fly more openly than the

German potash interests spread their net for the American flies which went blindly forward to the point that the potash industry has been almost destroyed.

There ought to be enough patriotism and enough broad-minded people in this country who realize the need of potash, home produced, to hasten the day when an adequate protective tariff will save us from dependence upon Germany and upon such of the fertilizer interests in this country as are allied with the German potash work.

OUR INCREASING FOREIGN TRADE.

IN a recent report of the total value of exports of merchandise, by grand divisions and principal countries, the Department of Commerce shows that for the seven months ending January, 1923, our foreign trade amounted to \$2,346,807,758. This is an increase of \$117,406,083 compared with the \$2,229,401,675 worth of merchandise exported during the corresponding seven months of 1922. Compared with the value of exports for the same seven months period of 1914, our exports now show a gain in value of about \$825,000,000, or over 54 per cent.

For the past several months each month's export values have made a substantial increase over the exports of the corresponding month of 1922. In January, 1923, the United States exported merchandise valued at \$335,539,192 which was an increase in value over the exports of January, 1922, of \$56,690,723, or 20 per cent.

In the following tabulation is given the total values of exports from the United States of merchandise, by grand divisions and principal countries, showing the extent and amount of American products purchased by the different foreign countries in January, and the total value for the seven months ending January, 1923, compared with the same periods of 1922.

TOTAL VALUES OF EXPORTS OF MERCHANDISE.

Grand divisions:		Month of January		7 Months Ended January	
Exports to:	1922.	1923.	1922.	1923.	
Europe	\$149,042,473	\$189,658,714	\$1,219,797,988	\$1,276,255,620	
North America	57,995,083	78,368,455	545,554,974	584,696,191	
South America...	13,852,569	21,323,640	102,071,931	144,805,913	
Asia	46,072,866	32,716,966	290,352,425	245,637,029	
Oceania	8,653,100	8,992,294	44,786,300	63,267,880	
Africa	3,232,378	4,479,123	26,838,057	32,145,116	
Total	278,848,460	335,539,192	2,229,401,675	2,346,807,758	
Principal countries:					
Belgium	\$7,059,586	\$10,281,317	\$64,248,265	\$65,550,721	
Denmark	2,754,131	3,878,226	20,610,696	20,467,222	
France	17,752,606	23,285,830	130,666,257	172,224,815	
Germany	23,669,195	26,085,756	207,383,808	175,418,977	
Greece in Europe	808,489	1,502,645	6,608,590	7,368,813	
Italy	9,265,829	15,489,041	93,545,165	112,488,180	
Netherlands	7,440,960	10,098,766	80,615,021	71,289,118	
Norway	1,452,030	1,387,685	15,452,128	16,841,029	
Russia in Europe	2,051,008	258,384	4,124,796	8,186,635	
Spain	5,821,268	4,301,489	37,736,342	40,706,171	
Sweden	1,878,550	3,123,122	17,807,061	21,437,923	
Switzerland	270,115	506,346	3,204,058	3,048,403	
United Kingdom..	64,933,120	83,602,951	495,676,138	526,294,377	
Canada	32,606,384	48,907,797	329,991,692	377,558,242	
Central America..	3,458,585	3,535,797	26,225,446	26,697,090	
Mexico	9,659,253	8,660,064	92,058,275	63,191,682	
Cuba	8,450,888	13,054,605	65,166,660	82,885,068	
Dominican Republic	555,985	880,696	6,775,532	6,682,186	
Argentina	6,187,001	9,209,500	41,763,323	59,833,143	
Brazil	1,688,791	3,647,051	20,948,872	27,838,340	
Chile	1,562,554	2,556,686	8,755,498	15,497,106	
Colombia	1,308,108	2,226,948	9,122,019	14,188,762	
Peru	866,926	1,289,400	6,782,438	8,745,103	
Venezuela	537,922	723,314	4,355,952	5,620,286	
Uruguay	841,280	899,438	4,918,805	6,693,473	
China	7,644,786	8,578,256	54,844,631	55,234,090	
British India	2,061,671	2,078,477	21,517,129	15,987,270	
Straits Settlements ..	377,933	633,704	2,400,008	3,733,189	
Dutch East Indies	485,125	1,080,442	5,592,405	5,516,109	
Japan	27,984,775	13,366,368	160,621,874	115,970,480	
Philippine Islands	3,246,611	3,779,882	20,910,304	25,730,063	
Australia	6,781,936	7,296,050	33,314,035	49,571,941	
New Zealand	1,842,230	1,608,119	10,454,824	12,768,322	
Br. South Africa	906,014	1,881,579	9,855,874	13,681,577	
Egypt	384,352	532,734	5,206,116	3,867,377	

FOR THE GOOD OF ALL.

"MOSQUITOES Must Go," says the Atlantic National Bank of Jacksonville, in a full page advertisement in the Florida Times-Union. "Let's make Florida more livable in the summer time and all work together and exterminate this pest," continues the announcement, which says further: "Why," do you ask, "should a bank be interested in mosquito extermination?"

"For the same reason that the United States Government, before undertaking to build the Panama Canal, cleaned up the canal zone, where previously no human being could keep well, mainly because of mosquitoes that infested that region, and by their stings and bites produced malaria and other diseases that made health of men impossible. Without health it was realized that no work could be done, no great enterprise accomplished. Hence, mosquitoes, discovered to be the main cause of sickness, were eliminated from the canal zone—and all the world knows what was accomplished—the construction of a great waterway, not only linking two great oceans, but shortening the distance between widely separated shipping points, bringing great benefit to commerce and transportation.

"That's why a bank, justifiably, is interested in mosquito extermination—that people may have a chance to be well and to work, capable of earning the money by which they live and prosper and have enough left to deposit in bank and thereby benefit themselves as depositors, as well as various businesses and industrial enterprises into which the banks place the money of depositors in order that business may grow and prosper, worthy industrial enterprises be aided financially and others established for the advancement of trade and industrial development, whether merchandising, manufacturing, agriculture, horticulture, or whatever is necessary to make a community, a state or a nation great and prosperous.

"There's another object the Atlantic National Bank has in view in this mosquito extermination matter and that is making Florida a better place to live in—for home people as well as for its visitors, the latter bringing annually into and spending in the state around thirty million dollars.

"In making Florida more fit to live in, by mosquito elimination, Florida people have less reason to go away from the state in summertime, to escape the mosquito pest; also, people from other states, and other countries, soon as they learn that Florida is rid of mosquitoes, or reasonably so, will come here in summer as well as in winter—and enjoy themselves, finding out that Florida is just as much a summer resort as it is a winter playground—with the mosquito banished."

The most important feature of this advertisement in our opinion is the evidence it affords of the enlightened interest of a large banking institution in a problem that might to the short-sighted seem to be of no direct concern to it. But the Atlantic National Bank knows its own future, and the welfare of the city of Jacksonville are tied up inextricably with the progress and prosperity of the state of Florida as a whole. Whatever helps the one helps the other.

Broad publicity of this character cannot fail to react favorably upon the institution which supports it. It is an example which many another bank in Florida and in other states of the South might well follow to the advantage of themselves and to their respective communities.

PIG IRON PRODUCTION OF 1922 INCREASED 63 PER CENT OVER 1921 OUTPUT.

THE total production of pig iron in the United States for 1922 amounted to 27,219,904 gross tons, reports the American Iron and Steel Institute. Compared with the exceedingly small production of 1921, this is an increase of 10,531,778 tons, or over 63 per cent. However, last year's pig iron production was 80,000 tons less than the country's pig iron output of 1910 and about 10,000,000 tons smaller than the output of the last six years, excepting 1921. In fact, excepting the production of 1914 and 1921, the pig iron output of 1922 was the smallest since 1911.

In 1922, the Southern States produced 3,230,828 gross tons

of pig iron, compared with 1,706,074 tons in 1921, an increase of 1,524,754 tons, or 89 per cent. The 1921 production of pig iron in the South was less than the output of 1900, and the 1922 production is 216,000 tons less than the South's pig iron production of 1910. The South is now producing about 12 per cent of the country's pig iron.

In the accompanying table is given the pig iron produc-

PRODUCTION OF PIG IRON BY STATES, 1921-1922.

States.	Production—Gross tons.		Increase.	Per cent. In-
	1922.	1921.		
Pennsylvania	9,731,788	6,252,766	3,479,022	55.64
Ohio	6,484,162	3,799,613	2,684,549	70.65
Ind., Mich.	2,728,727	1,893,611	833,116	44.00
Illinois	2,625,244	1,612,033	1,013,211	62.85
Alabama	2,230,619	1,207,408	1,023,211	84.74
N. Y., N. J.	1,772,325	968,660	803,665	82.97
W. Va., Ky.	460,311	264,729	195,582	73.86
Wis., Minn.	381,030	226,863	154,167	67.96
Maryland	366,967	147,189	219,778	149.32
Mo., Iowa, Colo., Wash. ..	266,716	226,364	40,352	17.83
Tennessee	123,907	19,479	104,428	536.11
Virginia	49,024	67,239	*18,215	*27.09
Maine, Mass., Conn.	1,084	2,142	*1,058	*49.39
Total	27,219,904	16,688,126	10,531,778	63.11

*Decrease.

tion, by States, for 1921 and 1922, showing the increase or decrease, by States, and the total for the United States. Virginia in the South, and Maine, Massachusetts and Connecticut outside of the South, are the only States reporting a decrease in production of pig iron in 1922.

AN AMERICAN LEGION OFFICER WHO IS STRONG FOR FRANCE.

Headquarters

Samuel C. Hart Post No. 14

of

The American Legion.

Salisbury, N. C., February 17.

Editor *Manufacturers Record*:

I have just read your article in your issue of February 8, 1923, on "Why France Was Justified in Going Into the Ruhr District," and want you to know that I heartily agree with you. Let me state here that I am not writing this for the American Legion, but as my personal sentiments, but I believe that if it were put to a vote of the ex-service men, that they would vote almost 100 per cent in favor of France, especially the men who saw service overseas.

I only wish that more magazines and newspapers would come out as you have, commending France for the action she has taken. I feel that any one who condemns France for this action only throws an insult to every ex-service man, especially to those of us who spilled our blood on the battlefields of France and Belgium, and more especially to those who died in defence of their country's honor. Let me urge you to give all publicity that you can as to the justice of France's action. It is our duty as true American citizens to stand by our country, and defend her honor in every way we can, and if we stand still and let German propaganda spread over our country, the men we lost, and the money we spent will all be in vain.

I wish that I could write my sentiments just the way I feel, but I am not gifted that way, but when I read your article I just felt like I wanted to let you know just how I feel about it.

I might say that our Post here has already passed a resolution commending France in her action, and I understand that such a resolution is being passed by American Legion posts all over the country, which all goes to show that the sentiment of the American Legion is for France; and who has a better right to know than the men who took part in the great World War?

S. A. RUSSELL.

INCREASED ACTIVITY IN THE COTTON SPINNING INDUSTRY.

ACCORDING to preliminary figures compiled by the Census Bureau there were 37,276,302 cotton spinning spindles in place in the United States on February 28, 1923, of which 35,307,707 were operated at some time during the month, compared with 35,240,853 for January, 1923, 34,968,440 for December, 1922, 34,664,630 for November, and 33,755,359 for February, 1922.

The aggregate number of active spindle hours reported for the month was 8,449,376,685. This number compared with an average of 40,008,203 for January, 37,658,116 for December, 39,469,039 for November, and 34,594,370 for February, 1922. The average number of active spindle hours per spindle in place for the month was 227 for the United States, 281 for the cotton growing states and 185 for all other states.

The total number of cotton spinning spindles in place, the number active, the number of active spindle hours are shown in the following:

	Spinning Spindles In Place Feb. 28.	Active Feb.	Active Spindle Hours for Feb. Total.
United States	37,276,302	35,307,707	8,449,376,685
Cotton-growing states.	16,274,272	16,034,743	4,573,187,364
All other states	21,022,030	19,272,964	3,876,209,321

REPORT OF SPECIAL COMMITTEE ON EDUCATION.

THE majority report of the special committee on education, James J. Storrow, chairman, of the Chamber of Commerce of the United States, has been published in book form. It deals especially with the participation of the Federal Government in education and says that "the Sterling-Towner bill, prepared by collaboration between representatives of the National Education Association, and representatives of the American Federation of Teachers, composed of those teachers who have joined the American Federation of Labor * * * is a long and radical second step towards federalizing the schools of the country." The bill is now in Congress.

The report says further:

"Great is the danger of handing the power of controlling the ideas and ideals of the growing generation to a group of bureaucrats located far away at the seat of Government. * * * Germany to her ruin and sorrow has reaped the harvest from seeds quietly sown in her schools for many years by the Berlin bureaucracy. * * * The creators of our Federal Government clearly foresaw and wisely undertook to protect us from the inefficiency and the dangers of over-centralization. * * * The doctrine of self-help, the idea that the things we get for ourselves are the best things we possess, that sturdily striving to care for ourselves builds character and citizenship, seems recently to have evaporated from the minds of many. They seem to think that each local group of American citizens should stand around like a Greek chorus waiting for the gods at Washington to make the next event happen."

Continuing this line of thought the report shows how that the large appropriation (\$100,000,000) proposed in the bill would result in making Federal control of education inevitable; that one appropriation of that amount would mean another sum later on and with equal reason. The tone of the report is impressive and commends it to careful consideration. Among other things it says:

"We believe it is desirable that there be a substantial increase in the appropriation for the present Bureau of Education to make it possible for educational research to be conducted on a larger scale and for a greater degree of leadership to be furnished to educational effort, especially in the more backward states."

The MANUFACTURERS RECORD has always vigorously proposed this movement for giving the national Government what would inevitably become a dominating power over the public school systems of the entire country. We cannot imagine a more dangerous scheme for destroying state and city individuality and independence.

HOW GOOD MANAGEMENT RESTORED AN INTERURBAN TROLLEY LINE—AN EXAMPLE FOR ALL STEAM RAILROADS.

A STRIKING example of the rehabilitation of an interurban railroad is cited by Edward Hungerford in a recent issue of *Colliers*. The working principle on which this trolley line was brought back from bankruptcy to a position of the utmost serviceability to its patrons is applicable almost in its entirety to any number of small, short-distance, steam lines throughout the country.

One reason why the railroads are failing today, as they have for a number of years, to meet the requirements of the traveling and the shipping public is their apparent inability to study with sufficient intensity the requirements of the community which they are intended to serve. There are some notable exceptions but in the main this is true. The experience of this interurban road certainly points a moral.

It was only two years ago that the electric line which runs from Chicago to Milwaukee was taken over by Samuel Insull and the present traffic manager, F. W. Shappert, placed in charge. The road was in extremely bad condition. It was freely predicted that it would have to be abandoned and the rails torn up. The new management, however, set to work with vigor and intelligence, the traffic manager writing over 39,000 personal letters soliciting passenger traffic in the first year. In addition, he had a corps of five young men for making personal calls. In the evenings the telephone was used freely for calls in one of the suburban communities and in one week 116 families were solicited. Out of this number, 106 said the reason they did not recommend the line for the trips of their children to and from school was that they considered it unsafe. Much personal work was necessary to convince these people that those days were gone forever, that the new management had the interests of the community at heart and would appreciate a test of its service.

Within a few months the beneficial effects of this vigorous merchandising was manifest and today more than half the local trips between Chicago and Milwaukee are made by interurban railway. The distance is 85 miles and throughout its entire length it parallels the six main line tracks of two ably operated steam railroads. There is no lack of competition by truck and automobile also as the line is paralleled by well-paved roads for the full distance. The fare is 3 cents a mile as compared with 3.6 cents by steam railroad. The saving is slight and the basis of argument for use of the interurban does not depend so much on the cost as it does on service. The dining cars serve over 380 meals a day. Reservations may be made from Milwaukee through the traffic manager on trains out of Chicago for the east and south; these Milwaukee patrons then go direct by interurban from that city to the Chicago terminals for their trains. The North Shore road gets business because it goes after it.

Our steam railroads in America today are, generally speaking, poor merchants, as Mr. Hungerford says, or more precisely speaking, they are unprogressive merchants. Other lines of trade learned years ago that the most satisfactory method of doing business was a big volume at small profits, but it seems that the railroads of the United States have yet to learn this great merchandising principle. This contrasts unfavorably too with the sales methods of railroads in Switzerland, Belgium, Italy and France even though it is conceded that nowhere in the world are there to be found more skilled operating executives than in the offices of our own railroads. Mr. Hungerford states with a great deal of truth:

"Sincere and ingenious attempts to merchandise transportation rarely fail. The railroad is not exempt from

most of the ordinary economic rules that govern other businesses. Yet sometimes I think it must imagine itself exempt, for there is so very little being done to induce me to ride upon it. One does not wonder that total passenger receipts are steadily dropping. The railroad takes care of my commercial needs in a sober, albeit somewhat indifferent fashion, but it does nothing whatsoever to tempt me. A smart merchant is not satisfied, when I go to his store, merely to sell me my necessities. The finesse of his profession is to induce me into luxuries. And there generally lies the volume of his profits."

Our entire passenger-rate structure and our transportation machinery are utterly inadequate to the needs of today. They should be done away with at the earliest possible moment and a new system worked out by practical and unselfish railroad men of ability and experience. The problem is not in any wise beyond such men, but until our railroads undertake to sell their transportation and offer their services the way other merchandise is sold they will in a large measure fail to live up to their opportunities, and the country will continue to suffer both from lack of physical equipment and in an even greater degree from the spirit of indifference which unfortunately seems yet to prevail in many otherwise well conducted railroad offices.

The interests of the railroads and the public are mutual but this common interest is not always apparent to the shipper and the traveller. He would like to see something of the same spirit of service manifested as prevails in the progressive mercantile establishments of the country. That this spirit is not incompatible with intelligent railroad management has been demonstrated over and over, and the experience of the Chicago, North Shore & Milwaukee Interurban is simply another illustration of a service principle which is as applicable to steam roads as to electric lines.

OPPORTUNITIES AND MISTAKES OF KENTUCKY.

KENTUCKY apparently does not desire to secure the lowest cost of construction work on its highways, for that state has a regulation that the Highway Commission is not allowed to advertise outside of the state, no funds being appropriated for that purpose. Under the law, the Highway Commission can advertise in only one paper in the county in which the work is to be done, and one state paper. Moreover, a definite price is fixed by law for this publicity, and the newspaper must either accept that price or not get the advertising; and the Highway Commission is thus deprived of the benefit of the right kind of publicity. Some time ago the State Highway Commission, desiring to secure men for that department, inserted an advertisement in a New York engineering paper, but the auditing department automatically deducted more than one-third from the amount of the bill charged, adjusting its payment not to the charge made by the newspaper but to the state's printing laws, and the balance of the amount has never been paid—a species of dishonesty which ought not to be permitted in any state.

Apparently the whole spirit of the Kentucky law of road building fails to bring the best results for the good of the state. The widest publicity in securing bids on highway and all other work is the only basis on which a state can secure the best results for public work. It is a pity that Kentucky is so far behind the times. Blessed as Kentucky is, with resources of almost boundless extent, resources which ought long ago to have made it one of the richest sections of the world, it has been held back by unwise legislation, and to a large extent by the concentration of the thought of the state upon horse racing and whiskey production—two interests which, wherever they have a dominating power, are destructive of all good progress.

Kentucky has some of the most wonderful soil in the

world. In agricultural potentialities it is rich beyond compare. In coal resources it is one of the most abundantly blessed regions on earth, having a coal area almost twice as large as that of Great Britain. It has great water powers, great forests of splendid timbers, and the combination of advantages is so unique and so remarkable that under better legislation and a broader view of business development Kentucky could be made to lead the South, aye, perhaps, lead the nation in the variety and richness of its agricultural and industrial development work. Its people have minimized their own power by so long permitting the concentration of the thought and capital of the state in the distillery and horse racing interests, neither of which is an upbuilder of a Commonwealth.

The breeding of fine horses under some conditions may be as profitable as well as a wise business, but it is not so much the breeding of horses as the race track and gambling spirit developed thereby that has been one of the curses resting upon fair Kentucky.

With wonderful resources in soil and climate, minerals and timber, and water powers, the progress already made ought to be far surpassed in the coming years, and Kentucky, with broader legislation and with the elimination of the distilling interests ought to go forward to a development which would add enormously to the wealth and material advancement of the entire state.

HISTORY THAT SOUTHERN STUDENTS SHOULD KNOW.

Commonwealth of Virginia
State Board of Education

Richmond, March 8.

Editor Manufacturers Record:

We are now revising our high school course of study, and I am inclined to think that the State Board of Education will be glad to incorporate in the outlined work in History a special study of economic conditions in the South based upon the Blue Book of Southern Progress.

This is information which high school students can appreciate, and certainly it is information which they ought to have.

HARRIS HART,
Superintendent of Public Instruction.

Superintendent Hart sets a good example for the superintendents of public schools in every city and state of the South. The facts presented in the Blue Book of Southern Progress should, we believe, be studied in every high school and every college, male and female, in the South. That the students of this section may know their own section better than they have known it before.

TRADE SCHOOLS IN SAN FRANCISCO PROVE SUCCESSFUL.

THREE additional free Trade Schools were opened in San Francisco in January by the San Francisco Industrial Association. These schools are to teach iron and brass moulding, brick-laying, painting and paper-hanging. They are operated along the same general lines as the plasterers and plumbers schools, which have already proved a pronounced success, having graduated over 325 boys and young men.

Because of the nation-wide shortage of mechanics in those crafts, plastering and plumbing contractors of San Francisco declare that but for the men trained in these schools they would have been subjected to a very material loss and delay in carrying on their work. The school for plasterers now operates in the evening as well as in the daytime, the evening

According to the Industrial Association, the three new Trade Schools are also proving successful and these will be kept operating until the normal demands of the community for this class of mechanics has been met. The Association declares further that the city of San Francisco completed the year 1922 without a single job or jurisdictional strike and that building permits showed an increased valuation of 115 per cent over the preceding year.

FROM far off Afghanistan comes a letter to the editor of the MANUFACTURERS RECORD acknowledging the receipt of a copy of our publication entitled, "The Prohibition Question Viewed from the Economic and Moral Standpoint," in the course of which the Supervisor of the European Section of Afghanistan writes:

[illegible]

A copy of the publication, "The Prohibition Question Viewed from the Economic and Moral Standpoint," was sent by the MANUFACTURERS RECORD last fall to every ruler on earth, so far as government records would show. Possibly

This letter from Afghanistan is typical of a number of others that have come to us within the last few months from the rulers of the world.

The following table gives the figures by States for the two years, and the percentage increase in each case:

States	Taxes on farm lands, 1921-22		% of 1913-14
	1913-14	per acre 1921-22	
Maine	\$.35	\$.60	172
New Hampshire	.36	.67	189
Vermont	.35	.65	187
Massachusetts	.63	1.20	189
Rhode Island	.59	.99	168
Connecticut	.50	.99	196
New York	.59	1.13	194
New Jersey	.96	2.22	232
Pennsylvania	.58	1.11	192
Delaware	.37	.68	182
Maryland	.50	.85	170
Virginia	.20	.34	176
West Virginia	.21	.52	247
North Carolina	.16	.44	269
South Carolina	.13	.35	262
Georgia	.16	.30	188
Florida	.28	.65	229
Ohio	.61	1.24	204
Indiana	.90	2.09	231
Illinois	.56	1.23	222
Michigan	.66	1.58	240
Wisconsin	.55	1.23	224
Minnesota	.37	.91	246
Iowa	.68	1.49	220
Missouri	.17	.39	225
North Dakota	.24	.63	258
South Dakota	.27	.80	292
Nebraska	.27	.67	249
Kansas	.27	.63	229
Kentucky	.24	.52	215
Tennessee	.19	.53	271
Alabama	.14	.27	188
Mississippi	.26	.67	259
Louisiana	.29	.77	267
Texas	.17	.35	214
Oklahoma	.28	.57	201
Arkansas	.18	.66	360
Montana	.7	.16	240
Wyoming	.19	.39	204
Colorado	.20	.68	340
New Mexico	.19	.33	172
Arizona	.7	.7	100
Utah	.24	.42	176
Nevada	.21	.43	205
Idaho	.59	1.40	235
Washington	.33	.70	215
Oregon	.27	.78	290
California	.42	.78	187
United States	314	709	226

A STORY OF PROGRESS IN GEORGIA.

Agricultural and Industrial Success Which Also Extends Into Alabama Along a Georgia Railway.

An exceedingly interesting and gratifying account of advancement in agriculture and industry during the last twenty or twenty-five years has been written by W. W. Croxton, passenger traffic manager of the Atlanta, Birmingham & Atlantic Railway, which traverses a region in Georgia and Alabama having a population of nearly 1,250,000 people, these counties showing an increase of 23 per cent, he says, in the last ten years. Continuing Mr. Croxton writes:

"In the 20-year period ended with the year 1918, (prior to inflation resulting from the war), the tax values of property in counties traversed by the Atlanta, Birmingham & Atlantic Railway, increased from \$33,000,000, to \$262,000,000, or nearly 800 per cent. The increase in values was not less in counties traversed by the road in Alabama than in Georgia so that its construction did actually create an increase in tax values many times greater than the actual amount invested in the property, to say nothing of the enormous value of the additional products grown and manufactured in new communities developed in consequences of its construction.

"In 1910 Georgia counties traversed by the railway produced 8,635,000 bushels of corn, while in 1918 they produced 17,319,000 bushels, or an increase of over 106 per cent. The increase in the number of hogs was nearly as great; in 1910 the number of hogs as given was 428,000 as against 749,000 in 1918, an increase of nearly 75 per cent.

"With the building of this line opportunity was offered for extensive development of resources in the territory reached by it and an agricultural and industrial department was created and has since been maintained in a high degree of efficiency. The territory is rapidly getting away from the handicap of one crop and is practicing diversification. Many industrial plants, representing large investments, have also been established. Moreover, during the last year the agricultural department has devoted itself primarily to the establishment of creameries and the introduction of dairy cattle; thus creameries have been opened in Atlanta, Birmingham, Talladega, Moultrie, and Cordele, besides other points. Steps have also been taken to establish and maintain permanent pastures.

"Notable success has been achieved in raising pure bred beef cattle and hogs. Georgia stock men several times have won the highest awards for both cattle and hogs at the International Livestock Show in Chicago, as well as at other shows.

"Eight years ago the agricultural development service of the road introduced the growing of bright leaf smoking tobacco in the southern part of Georgia and the yield of that crop last year amounted to almost \$1,750,000, the price averaging 25 cents a pound and some farmers had a net profit of \$500 an acre.

"Among other crops advocated by this department is Meade cotton, which is recommended by the United States Department of Agriculture as a substitute for Sea Island cotton, and it has been grown successfully in Georgia for six years. The staple will average about 1 5/8 inches in length; it matures about as early as the short staple and sells for from one half to three quarters more per pound than the average of short staple. Another industry begun is raising of the "Pineapple Pear," which is claimed to be blight proof, and is of great commercial value for canning and preserving.

"As a cash crop Georgia peaches rank second to cotton, the value of the crop in 1921 being over \$10,000,000 and in the territory traversed by the Atlanta, Birmingham & Atlantic Railway between Atlanta and Cordele the new planting in this district alone is running at the rate of about 250,000 trees a year. A large number of farmers in the Montezuma

section, including many peach growers, have this year contracted to plant 500 acres in asparagus, which hitherto has been grown extensively and very profitably around Marshallville and Fort Valley. The poultry industry in Georgia and Alabama is also making rapid progress; there are now many 1000 hen farms shipping fresh country eggs, frying chickens, and day-old chicks."

These quotations are some of the high points in Mr. Croxton's most interesting story, which is concluded with the remark that the agricultural development service is actively assisting shippers to find satisfactory markets.

Enormous Increase in Exports of American Industrial Machinery to Asiatic Countries.

Startling development in the far eastern market for American industrial machinery is shown in a Government report—"Asiatic Markets for Industrial Machinery"—by W. H. Rastall, chief of the industrial machinery division of the United States Department of Commerce. Prior to and including the year 1911 Mr. Rastall was selling industrial machinery in Asia and from 1918 to 1921 he went there again as trade commissioner of the Department of Commerce to especially investigate the machinery markets. Now he says that the "unchanging East" is changing rapidly and profoundly. During the last three years Asia has absorbed as much machinery as it would have taken in fifty years if measured by the standards of 1915. Suddenly, within three years, these markets have absorbed some \$178,000,000 worth of American industrial machinery. The potentialities of such a volume of machinery in the hands of the millions of Asia is tremendous and its presence will encourage the installation of more. The whole continent from Yokohama to Bombay wants to be industrialized.

Total exports of American machinery are shown to have increased seven fold between 1910 and 1921 as follows: 1910, \$51,489,598; 1913, \$96,471,072; 1915, \$77,047,331; 1918, \$52,653,049; 1919, \$320,455,759; 1920, \$383,630,357; 1921, \$246,436,364. It is noted that while the war had a profound influence on this development it was less than indicated by the figures, for the growth from 1910 to 1913 was very pronounced and now, in spite of adverse conditions following the Armistice, American exports of machinery are far above the figures of ten years ago.

In 1919, according to the report, there were in the United States over 4000 factories producing industrial machinery valued at over \$2,200,000,000 of which about 17 per cent was exported, this percentage it is observed often representing the difference between profit or loss in a plant. Therefore, it is pointed out that the importance of the foreign markets to American machinery manufacturers is great, and in this connection the report of Mr. Rastall notes that the distribution of industrial machinery exports by grand divisions shows increase in the percentage of all machinery exports which went to Asia as follows: 1910, 7 per cent; 1913, 6.8 per cent; 1915, 5.8 per cent; 1918, 13.4 per cent; 1919, 22.9 per cent; 1920, 18.5 per cent; 1921, 26.1 per cent. While depression followed the boom years of 1918 to 1920 inclusive, indications, it is stated, are that the trade will largely readjust itself by 1924. Several machinery dealers in Asia estimated that the level would be not less than 60 or 70 per cent of the volume of 1920. Excepting Great Britain there is no country other than the United States which exports anything like the amount of machinery indicated by these figures.

The book, which contains 332 pages, with illustrations and maps, gives details concerning the Asiatic market for machinery and much other data of value to manufacturers and exporters. The book can be secured from the Superintendent of Documents, Government Printing Office, Washington, D. C., for 60 cents, or it may be similarly obtained at any office of the Bureau of Foreign and Domestic Commerce.

A Well Rounded Out Paper-Making Industry in Western North Carolina—A Marvel of Efficiency.

PLANT OF CHAMPION FIBRE COMPANY AT CANTON ONE OF MOST COMPLETE AND EXTENSIVE IN THE COUNTRY—THE THREE DEVELOPED PROCESSES FOR MAKING PULP ARE ALL EMPLOYED HERE—LARGE FOREST RESERVES INSURE PERPETUITY OF OPERATIONS—INTERESTING COMMUNITY DEVELOPMENT FOR WORKERS IN VARIOUS DEPARTMENTS OF THE ENTERPRISE.

By CARROLL E. WILLIAMS.

Canton, N. C.

In this almost unmatched mountain region of the South, where climatic conditions and natural advantages make certain as the years go by the development of many lines of highly diversified industry requiring the highest skill, is located at Canton a paper mill which ranks as one of the great industries of the country. We talk much about the progress of cotton mills and iron and steel interests and coal mining development in the South, and we do well, but here and there in this heaven-favored land are being developed diversified industries whose importance and extent are only realized when the story of what they are doing is told abroad. Some of these industries, such for instance as that of the Champion Fibre Company, rank among the really great enterprises of America, and yet except to those in the immediate vicinity or to the railroads that handle their material their magnitude and efficiency are not understood or appreciated.

In the plant of the Champion Fibre Company here there are employed all of the three processes for making paper pulp—that is, soda, sulphite, and sulphate. Daily it turns out 375 tons of such material, and in addition a variety of by-products, for which ready distribution to all parts of the world is assured. An idea of the great size and capacity of this plant may be gained by a study of the fol-

lowing figures representing consumption for every four weeks' period:

	Tons		Tons.
Size	40	Coal	17,500
Alum	35	Nitre cake.....	750
Soda ash.....	600	Sulphur	320
Lime	1000	Chlorine gas.....	300
Salt	750	Wood (20800 cords)—	2350
			(carloads)

Daily more than 37,000,000 gallons of water are utilized in operating and in the various processes, sufficient for industrial and domestic consumption of a city of no mean size. And a large portion of this water must be thoroughly filtered to remove all impurities; the water that you drink would be unfit for use in "washing" at this plant. Stated otherwise, the water supply daily is 150,000 tons. Electrically driven pumps are provided for fire protection. A large concrete storage basin is located on a nearby hill to maintain a steady pressure and insure a continuous supply of water.

Each day more than 600 tons of coal are consumed under the battery of boilers for the production of steam for power purposes and for the manufacturing processes, but to insure the utmost economy all exhaust steam is utilized in the evaporating processes. The coal is produced at the Black Diamond Mines, Coal Creek, Tenn., operated by the company, at the rate of 1200 tons daily, so that in addition to assuring



THREE METHODS OF TRANSPORTING LUMBER INDICATED HEREWITH, BY FLUME, BY STEAM TRAIN AND BY WAGON ROAD.



PANORAMIC VIEW OF THE PLANT, STORAGE YARDS AND RAILROAD OF

a ready supply for the needs of the plant a considerable amount is offered for sale. To provide against shut-downs through lack of fuel a vast storage space is provided at the plant, the coal being handled by clam-shell equipped standard gauge locomotive cranes.

The normal supply of wood on hand at the plant for pulp-making purposes is 75,000 cords. It is received at the rate of 60 to 75 car loads daily, and special handling facilities and transfer cars are employed. The company owns and controls more than 125,000 acres of timber lands in western North Carolina, about 60 per cent of which is hardwoods, 5 to

are able to find a ready market not only for cord wood but for lumber as well.

The company is operating at the present time two modern band mills, one at Waynesville and the other at Smokemont, with a daily capacity of about 75,000 feet. By utilizing only the low grade woods for pulp making, the company is enabled to market high grade lumber, such as poplar, spruce and other woods. The pulp wood produced in these operations is what may be termed a "safety valve" to the manufacturing operations at Canton. When outside shipments of pulp wood slacken mill operations of the company increase, and contrariwise. By eliminating the low grades it permits of the sale of choice woods at attractive prices, and this year between 12,000,000 and 15,000,000 feet of such lumber will be marketed, the production having been estimated for 1923 at 18,000,000 to 20,000,000 feet. From 7,000,000 to 8,000,000 feet of lumber is always kept in storage ready for shipment, although the firm keeps well sold-up and the lumber is shipped-out very closely on orders. The company does not now operate its own dry kilns, but takes advantage of the opportunity to "mill in transit" at such nearby points as Asheville and Biltmore, at plants of other lumber companies having dry kiln equipment. The installation of dry kilns is planned for the near future. The timber supply about the Smokemont mill will insure operations for from 15 to 20 years, while about Waynesville there is a supply to keep the mill operating for about five years. Plans are now being considered for the erection of a third modern mill at the Lufky operation of the company. Reforestation experiments are under way, looking to insuring a permanent supply of lumber.



SMALL SECTION OF THE 10-ACRE STORAGE PILE OF CORD WOOD USED IN PULP-MAKING.

An average of 50,000 cords of wood is kept always on hand, since the huge plant consumes this raw material at the rate of 20,800 cords every four weeks.

8 per cent hemlock and miscellaneous woods in small amounts, and the remainder spruce. This acreage is used as a reservoir, as it were, upon which to draw should supply from the outside be insufficient for the needs of the pulp mills. That is, cord wood as well as low grades of lumber are purchased from outside interests within a radius of 250 miles, freight rates in that area permitting shipping into the plant to advantage. Thus employment is given to hundreds of farmers and others who own timber lands, for they

In order to cut, mill and market the lumber contained in the huge acreage the company owns and operates about 60 to 75 miles of railroad, the most of it 36-inch gauge, on which geared locomotives of the Shay, Climax and Heisler types are used. In addition, modern lumbering equipment is used to large extent, such as cableways, skidders, etc., as well as many miles of flumes. In these operations about 1000 men are engaged.

All selling of lumber is handled by the company itself, the work being in charge of F. L. Winchester. Wholesalers and large consumers are the principal purchasers, the mate-



THE CHAMPION FIBRE CO., WITH PORTION OF VILLAGE OF CANTON, N. C.

rial being for house building, furniture, automobile body manufacture, etc.

Thus, this plant is exerting a big influence on the development of western North Carolina, for it enables small lumber manufacturers and farmers to always turn their low grade stocks into cash. And the lumber is brought to the plant by the various producers via skidways, narrow gauge railroad lines, mule drawn vehicles, and ox-carts.

Nothing is wasted at this plant. As the exhaust steam from the boilers and engines is used for heating and evaporating purposes, so must even the wood serve a double purpose. The largest tannic acid plant in the world is located here, the production being in excess of 500 barrels of liquid chestnut wood extract daily. The "spent" wood is then available for manufacturing pulp. In addition turpentine in considerable quantities is extracted from pine wood before it is utilized for pulp making. There is also produced an extract known as "Bindex", an adhesive that is suitable for use in making cores for foundry castings. It is also used largely for settling dust on roads and floors. A complete electrolytic plant for the production of bleach necessary in pulp and paper manufacture is operating, and there is produced as a by-product ten tons of caustic soda daily, which has a wide distribution to textile mills in this country operating bleacheries.

Last August the first unit of a paper plant with a daily capacity of 50 tons was put in operation, and this is now about complete, so that about one-sixth of the company's output of pulp will be made into finished product at Canton. In the near future the paper-making capacity will be increased to 100 tons daily. This is in line with the continuous expansion program; and the present plant is just five times the size of the original unit. Kraft, wrapping sulphite bond, book and fine bristol and post card board are the papers now produced.

All the construction work is undertaken by the company's own forces, and a complete engineering department is also maintained. The buildings, which cover a vast expanse of ground, are all of fireproof construction, and arranged to permit of easy expansion. The site at Canton is served by about 40 miles of standard gauge track, which with an ample equipment of cars, provides the best possible transportation facilities. The system is operated day and night, with a force of 1500 men.

The pulp produced is used by paper manufacturers throughout the country. But with the steady growth of the South the time seems not far distant when the entire output may profitably be made into papers of every description for sale

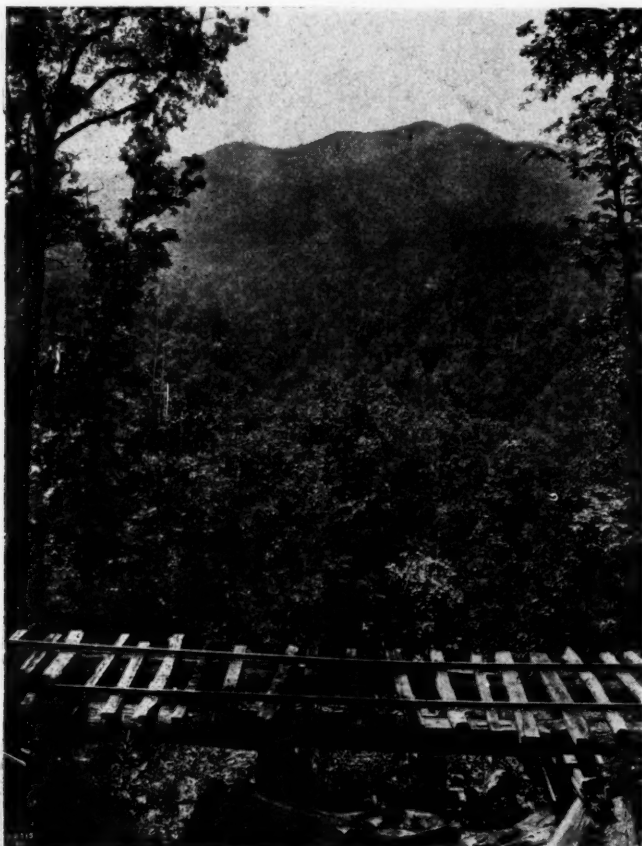


TYPE OF CONSTRUCTION FOR THE LUMBER RAILROAD, AS REQUIRED BY CHARACTER OF THE COUNTRY.

for the most part to Southern consumers. The same is true of the caustic soda production and distribution—an easily accessible supply being assured Southern bleacheries. Tanning extracts are sold mostly North and West, although the demand for these products comes from all over the

world. One extract, "Bludtan," was shipped in January to England, India, Japan and Cuba. On the day the MANUFACTURERS RECORD correspondent visited the plant cablegrams were received for immediate shipments of this material to Denmark and to Holland. England is said to be entirely dependent upon outside sources for its supply of tanning extracts, and the biggest competitor of this country in Europe is France.

"As the South develops we expect to play a more and more important role by becoming a greater factor in that development," states R. W. Griffith, sales manager of extracts, adding, "We feel that the production of such materials as manufactured at Canton is essential to the well-being of mankind generally, and therefore constitute essentials which insure a steady and growing demand, which will per-



RESERVE STAND OF TIMBER OWNED BY CHAMPION FIBRE CO., IN WESTERN NORTH CAROLINA.

The company is now operating two mills in this section and will probably put a third into operation. There are 1200 people engaged in this work.

mit us to operate all departments at capacity and to expand as the demand increases."

In the production of sulphite pulp the principal woods used are hemlock, spruce and poplar. Sulphate pulp is made from pine wood, and soda pulp is made of chestnut and a large number of other woods in smaller quantities.

To operate such a plant boilers totaling 15,000 horse power are provided, this including 24 Heine of 316 h. p., two Connelly of 600 h. p., and three Stirling of 823 h. p. Two reciprocating engine-generator units of 1200 kilowatts capacity, one steam turbine of 1250 kilowatts, and another of 750 kilowatts capacity are used to produce electric power, in addition to about 2000 kilowatts purchased outside. In addition a reciprocating engine-generator set of 1000 horse power is used to supply current for the electrolytic processes. This is backed up by two 500 kilowatt motor-generator sets. The monthly consumption of the plant amounts to about 4,000,000 kilowatt hours. A total of 375 motors of all

sizes are in use, aggregating 14,000 horse power, and all equipment as far as possible is direct connected, to eliminate belts, pulleys and shafting.

A complete electrical repair shop and machine shop with competent forces are operated to take care of all equipment repairs, installation and new construction.

Two hundred families in individual houses owned by the company and rented for nominal sums make up a large

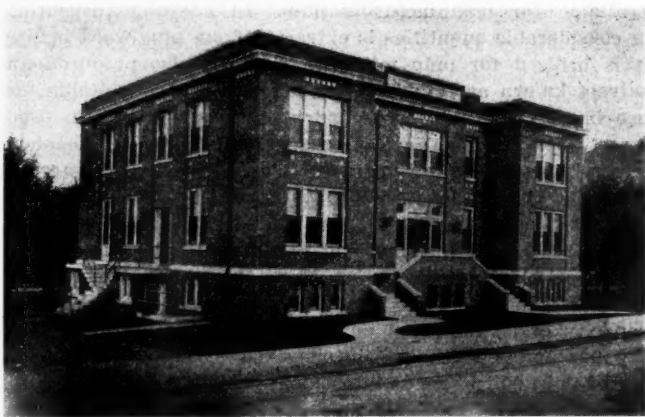


CAUSTIC SODA CELL ROOM.

part of the village. In addition employees are encouraged to purchase sites and erect their own homes, and many have availed themselves of this opportunity with the company's aid. A splendid Y. M. C. A. building is provided, and a superintendent of vocational training is employed the year round to enable employees to get advantages of specialized higher training.

A splendid school building, that would do credit to any community, is a development of recent years in Canton. It took the place of an old and wholly inadequate building, and it is significant that already another school building of the modern type is under consideration.

The Champion Relief Association is operated by the employees for their benefit in sickness and death, etc. A co-



MAIN OFFICE BUILDING.

operative store enables all employees participating to get supplies at near cost. The building for the purpose was given the workers by the company.

A monthly publication known as the "Log" is edited and published by the employees. Various contests are conducted during the summer in the interest of home beautification with good results.

The officers of the company are as follows: Peter G. Thomson, Jr., president and manager of sales; Reuben B. Robertson, vice president and general manager; Charles S. Bryant, secretary and treasurer; and Herman A. Bayless, assistant secretary.

German Forests and the French Occupation.

THE FORESTS ARE EASILY ACCESSIBLE TO THE FRENCH AND THEIR GENERAL SEIZURE WILL EXERT POWERFUL ECONOMIC PRESSURE ON GERMANY—A SKETCH OF GERMAN FORESTRY.

Washington.—One of the alleged defaults of Germany preceding the French occupation of the Ruhr region was in the delivery of forest products to France as reparations payments in kind. The French have been taking over the direction of the public forests in both the Rhineland and the Ruhr, as well as the coal mines, in order to secure deliveries to France and also as a means of realizing reparations credits by taxing exports from them to the rest of Germany, says a statement issued by the Information Bureau of the National Lumber Manufacturers Association here.

The forest regions of Germany are chiefly in the southwestern part of the Empire in or adjacent to the Rhine Valley and are therefore in a situation favorable to occupation and exploitation by the French should they decide, in view of the recent decision of the Reparations Commission that Germany is in default on reparation schedules, to extend still further the zone of occupation for the purpose of collecting payments on reparations account by means of export taxes. In this manner, too, the French grip on German industrial life, as a means of compliance with the French program, will be second only to the occupation of the great Rhenish-Westphalian coal and industrial sectors.

The French have been especially interested in reparations payments in kind, of coal and forest products, because France is deficient in both of these natural resources and because it was on them that the German devastation during the war and the incidents of warfare bore most heavily. Extensive areas of forests were devastated along the five-hundred-mile battle front in France and moreover the Germans destroyed maliciously for their own use very large forest areas in the territory they occupied during four years. At the same time the exigencies of the war compelled the French to cut down their own forests without regard to the principles of forest conservation which had prevailed for the last hundred years.

On the other hand, "none of the German assets is less affected by the horrors of the last eight years," writes Dr. C. A. Schenck, former director of the Biltmore, (N. C.) Forest School, but who has now resumed his residence in Germany, in an article in *Journal of Forestry*—"the woods stand intact." Notwithstanding the demand put upon the German forests during the war, there was not enough labor to keep up the normal cut. Now, although the pressure to buy domestic forest products is enormous, owing to Germany's inability to buy abroad to any extent, the forests are being inexorably maintained, although there is much demand, especially near cities, for the removal of forests in order to make way for the increase of domestic production of foodstuffs, so much needed in Germany because of the obstacles in the way of purchasing enough abroad to make up the home deficit.

Fear has been expressed in some quarters that the French administration of the seized German forests means that they are to be ruthlessly destroyed without regard to the future. Such, however, is not the case. What the French are planning to do is to use the forests about as the Germans themselves have been using them, that is, on the basis of maintaining a perpetual yield, although it is possible that they may cut somewhat more than the German forestry practice, which aims at making the annual cut a little less than the annual new growth. This possibility is indicated by a pamphlet written by G. Huffel in 1919, as a sort of guide to the reparation possibilities of the German forests. Huffel suggested that as one of the penalties of the war all trees of sixty-one years of age and upwards should be cut from the

German state forests. He calculated that such a plan of exploitation would yield approximately 340 millions of cubic meters of wood, which is about eighteen times the ordinary annual production of wood from the state forests. Mr. Huffel then found himself confronted with the problems of how to harvest such an extraordinary timber production. He finally calculated that in addition to what the Germans themselves would normally cut, it would require 50,000 men for five years. He proposed to find these workmen among the Turkish and Bulgarian prisoners of war, who, he thought, would find it very pleasant to work for five years "among their Boche friends in this work of reparation and of justice." "The Bulgarians, especially," he adds, "are certainly very good laborers, who will undoubtedly give complete satisfaction in this task."

Mr. Huffel was satisfied, in view of the quantity of lumber needed for replacement of destroyed structures and the fact that France produces only about half enough wood for its own uses, and that Great Britain produces practically none, that between them, with the requirements of Italy, Belgium and Serbia, they would be able to absorb the whole of the 340 million cubic meters.

The other day Herr Fedell-Below, the imperial commissary of forests, at Wiesbaden, refused to turn over his records to the French, declaring that the Wiesbaden forest did not belong to the state but to the municipality, and was thereupon dismissed from his office and expelled. The French evidently were not disposed to accept his distinction between national and municipal forests. Incidentally, it is a curious fact that the dual administration of the municipal forests is partly an outgrowth of the occupation of Germany during the Napoleonic period by the French, who insisted on administration of the municipal forests by the central governments. However, although there is much intermingling of control and administration of national and local administrations in connection with the municipal forests, it appears that there is a clear line of demarkation as to ownership in general, whatever may be the status of the Wiesbaden forests. According to Huffel, himself, the municipal forests of Germany constitute 2,061,684 hectares or approximately one-sixth of all the forest area of Germany. The remainder is divided as follows:

	Hectares
Privately owned forests	6,414,812
Forests connected with public Governmental agencies	514,715
Direct governmental forests	4,307,524
Crown land forests	257,302

Stated in acres, the total area of the German forests is approximately 33,500,000 acres, which is 26.7 per cent of the entire area of Germany. The principal woods in these forests are pine, spruce, silver fir and larch, of the coniferous species, and oak and beech of the hardwoods, the former constituting about two-thirds of all the German forests.

Governmental supervision of municipal or communal forests is held to be necessary in order to protect local communities against administrative errors. Thus, when authority was weakened during the revolution of 1848, some villages sold their forests and "invariably became impoverished, while in those which were wise enough to keep them the forests now frequently pay all the taxes of the community, and in addition help materially in lessening pauperism, in increasing credit and enabling large enterprises to be undertaken. Besides merely financial advantages, the communal forests exercise a most beneficial moral influence upon the members

of the community by creating in them the feeling of local attachment and by adding fresh charm to rural life. Most commercial forests serve as great parks in which the beauty of the landscape is preserved unharmed, and a network of well kept roads and paths, with occasional benches along them, is maintained."

All German forests, whether owned by the state, municipalities or privately, are administered on the principle of perpetuation of the forest as a whole, the economic conditions being such as to make reproductive lumbering profitable.

In the matter of public forest policy Germany arrived at a corresponding period to that in which the United States now finds itself, about the 18th century, when the woods "were culled of their wealth and then grew up to brush." When the German states began to pass laws and ordinances designed to bring about conservation and reforestation, they were confronted by a situation which was more difficult of solution than any factor in the present forestry problem of the United States. "The worst feature, from the standpoint of forest treatment," says Dr. Bernard E. Fernow, in his "History of Forestry," "which resulted from changes in property conditions and relationship, was the growth of the pernicious servitudes or rights of user, which were either conferred to propitiate the powerless but dangerous peasantry, or evolved out of the feudal relations. From the 16th to the 19th centuries these servitudes grew to such an extent that in almost every forest some one outside of the owner had the right to use parts of it, either the pasture or the litter or certain classes or sizes of wood. These rights have provided the greatest impediment to the progress of forestry until most recent times, and only within the last few decades have the majority of them been extinguished by legal process or compromise."

In the first general panic of realization of the meaning of the destruction of the forests in an age when coal was as yet little used for fuel and there were not the substitutes for wood that have come in later times, ordinances were passed most minutely regulating the use of wood. It was forbidden to hang out green brush to designate a drinking hall or to cut up May trees. Plans for buildings and building operations were required to be inspected by public authority to see that they were most economical of wood. It was ordered that repairs must be made promptly to avoid the necessity of using more wood later in more extensive ones; that when new buildings replaced existing structures they should not be larger than the old. In Saxony it was ordered that the whole house must be built of stone, while elsewhere the building of stone base walls and the use of brick roofs instead of shingles was insisted upon. Even the number of houses in any community was restricted; and wooden fences were ordered to be supplanted by hedges and ditches. Economies were decreed in charcoal burning; in potash manufacture and in the turpentine industry. The use of potash for fertilizer was forbidden entirely. In fuel wood it was permissible to use only the poorer wood and wind falls and these only in public bake ovens; and other savings were effected by improving stoves, restricting the number of bath rooms, etc. The substitution of turf and coal for fire wood was also ordered in some sections; peeling of trees for tanbark was forbidden; only top dry oak was allowed for cooperage; coffins had to be of softwood and sometimes wood was not permitted for that purpose at all. Along with these economies were crude efforts to protect the forests from fire and to regulate the cutting of such timber as it was permissible to use. From these beginnings has grown up a very elaborate forestry policy and a forestry administration as thoroughly organized as the German army itself was before the war.

The general method of forest utilization in Germany is to divide a given forest into as many sections as there are years

in the period required for the trees to reach maturity. For example: "If we take a forest of a thousand acres and assume that the profitable age of utilization of the trees is fifty years, it will be divided into fifty sections which will be so cut and planted that the plots will successively differ from each other by one year; that is, twenty acres of fifty-year-old trees, twenty acres of forty-nine-year old trees and so on down to the last planted twenty acres, with one-year-old trees." Thus, only twenty acres of the 1000 would be cut and twenty acres planted each year, and it is a fact that such a proportionate representation of trees of different ages actually exists in the German forests except as it is modified by the gradual extension of the forest area, which results temporarily in a greater percentage of young trees. It has been for a long time the German policy to increase the public forest area by buying devastated and deforested lands or by exchanging for them agricultural land from the public domain.

A German forest, being the product of regulated plantation, often looks more like a fruit orchard than an American forest. The artificially planted trees are in regular rows and the forest is sub-divided into blocks by avenues or lanes one hundred and thirty to six hundred feet wide. These avenues are annually burned over to keep them free from combustible debris or are planted in grass. In consequence of this arrangement and fire-fighting organizations, the forest fire loss has been kept down in Germany to about one acre annually in 4500 acres and in some years only one in 8000 acres. In the United States more forest land is burned over than is cut over. As a rule the forests are strictly confined to lands having poor soil; so far has this principle applied that even in the rough mountain regions the bottom lands and fertile benches in the midst of the forest are under cultivation. Because the forests are often of small extent, because of the system of rotative cutting and also because lumbering in Germany is a local or regional, rather than national industry, logging operations are on a small scale and the sawmills are of small capacity, but are permanent, as are the communities dependent on them. A German sawmill or sawmilling community never moves on.

Partly owing to this careful management and partly to the high price of forest products in Germany the Saxon state forests, comprising only 430,000 acres, yield an average annual revenue of \$4,000,000—about equal to that now derived by the federal government of the United States from its empire of 156,000,000 acres of National Forests, although the income from the latter is constantly increasing and could be greatly increased were the United States Forest Service to depart from the conservative policy which wisely has been followed from the beginning of the National Forest Reserves in 1891.

Notwithstanding care and foresight, it has been found impossible for Germany to meet her requirements for wood from the domestic forests. The constantly increasing per capita consumption of wood and the rapid growth of the population and industry necessitating the agricultural utilization of every acre adapted to that purpose, has made Germany a wood importing country since 1863. In recent years while her forests have yielded her \$280,000,000 worth of wood annually, she has been compelled to import \$70,000,000 worth, largely from Russia and Finland.

In this deficit may be found the explanation of what the Reparations Commission declared to be the willful failure of Germany to make delivery of forest products in kind as decreed by the Treaty of Versailles. On the other hand the annual deficit of home production of wood in France has been increased as a result of the ravages and excessive uses occasioned by the war, to about 60 per cent. In consequence the French are as determined to enforce the payment of wood

reparations in kind as the Germans are reluctant to make them.

American foresters and lumbermen will watch with particular interest the development of this side of the French occupation of the Rhineland and the Ruhr.

Developing Copper and Gold Mine in Lincoln and Wilkes Counties, Georgia.

By N. L. WILLET, Augusta, Ga.

At Lincolnton within forty-five miles of Augusta in Lincoln County and a part of Wilkes is the Georgia Copper Company's mine. As one looks today at the operations of this mine on which \$700,000 have already been spent one wonders if the old post-office of Lincolnton may not in future be known as a great miners' post-office and whether, too, old Lincoln County with its mountains and hills and rocks long known to be full of minerals, may not soon become a Mecca, for there is no attraction equal to that of a paying mine, for mine prospectors, engineers and capitalists.

Of all the ways to wealth, that via the mine is the most entrancing, for there is always hope of striking it rich and the mine way too is always honest riches. The world holds infinite wealth but the best of it and the most of it is not on its ephemeral fleeting top but is under ground.

Every mine is the abode of mystery, the whence and the how of it. The romance of romances would be the written history of a mine; and why unless transmutation be true should we find in the one mine such a combination usually of seemingly unrelated metals?

The Georgia Copper Company's shaft is at present 285 feet deep. The water level is 90 feet. There are six veins and between them the "country rock" is quartz and granite. The depth of this mineral rock goes down one thousand to three thousand feet. Its known length is at least one mile. Its width of vein is seven to thirty-seven feet. In sixty days the company expects to mine daily one hundred and fifty to two hundred tons of ore which means one car of concentrate.

Cash returns as shown from a recent car of concentrate of twenty-three tons as sent to New Jersey are as follows:

Copper	\$311.44
Silver	99.67
Gold	248.04
Lead	282.49
Total	\$941.64

One car of thirty tons, therefore, would show a cash out-turn of from twelve to fifteen hundred dollars.

The veins are not homogeneous throughout as to contents. For example, the lead content may be heavier at one point than another. The rock as mined is dark and heavy and heavily charged with varied minerals that glisten and gleam as imbedded in their prison. The formation of the mine is similar to the well known Ducktown Copper Mine of Tennessee; that is, the two mines produce the same materials. I am told, however, that the copper average in Ducktown is two per cent as against Lincolnton five per cent, and that silver and gold out-turn in Ducktown is smaller than that of Lincolnton.

In other words, representative men declare that the Lincolnton mine is richer than the Ducktown mine. The mineral supply at Lincolnton seems to be almost without limit. I have been told that the average mineral contents of the Georgia Copper Company's mine is: copper 5 per cent; lead 12 per cent; 6 ounces silver, and \$3.50 of gold per ton of concentrate. The present manager of the Georgia Copper Company is Mr. C. W. Renwick who was for nineteen years with the Ducktown Company and for eight years was general manager. The executive head of the Georgia Copper Company is Mr. M. N. Whittaker.

The deeper the Georgia Copper Company carries its shaft the better and richer the ore. The company hopes to go a

thousand feet deep this year. They feel that their mine is to be a big source of wealth and that they have practically an inexhaustible supply. Late in the year they expect to build a smelter and an acid plant and will be a large producer, as is Ducktown, of sulphuric acid—sulphur being a part of all copper mines.

The company does its own concentrating through grinding mills and oil process, thus reducing one hundred and fifty tons crude to thirty tons concentrate. The concentrate is sent to Perth Amboy, New Jersey, to the American Metals Company who smelt it.

The Georgia Copper Company own 901 acres of land but this is only a minute portion of Lincoln County, where for more than a generation mining, though in its crudest forms, has been going on. The county has always been known as a mineralized county. Gray's Mountain in the county is owned by The Tiffany Company, New York. I have seen from this mountain beautiful specimens of that costly and very hard metal largely used by jewelers and known as molybdenum.

It has now been left to outsiders to make a real beginning in the extraction of metals in Lincoln County and in nearby portions of Wilkes. The most of us nearby know nothing of the beauty and wealth that lie in these mineral veins whose post-office is Lincolnton, Georgia. The future development of these mineral deposits will probably show that we natives have been, in fact, fast asleep on the job.

Attractiveness of the Lower Rio Grande Valley.

"Happiness is the reward of hard work." This epigram is appropriately placed at the top of the front cover page of a beautifully prepared booklet, "The Gulf Coast Country," issued by the Gulf Coast Lines, Houston, Tex., and dealing especially with the lower Rio Grande Valley. This region lies at the southernmost extremity of the Lone Star State, forming a cape as it were, for it is between the Rio Grande and the Gulf of Mexico. Being in latitude 26 degrees north it has a mild climate suitable for agricultural operations all the year round. Here, it is noted, oranges and grapefruit are picked in December and January, this fact illustrating the remarkable winter season of this section. The booklet tells of what can be done in the way of raising citrus fruits, besides fall, winter and spring vegetables. Staple crops grown in the valley are also described including cotton, corn, hay, alfalfa, sorghum, etc. Livestock, farming, dairying and poultry raising are also profitably practiced, not to mention bee culture. Farming is done with irrigation, thus assuring moisture when required.

The community spirit which prevails in the region is shown in the development of the cities, towns, and villages which are well equipped with educational and other facilities that go to make life attractive and in every way healthful and progressive. The booklet is finely illustrated with a large number of pictures showing farm and other scenes, those relating to the extensive irrigation plants and distribution systems being among the most impressive.

American Rolling Mill Company to Erect 100 Dwelling Houses.

Initiating a house-building program to provide accommodations for the operatives at its plant at Ashland, Ky., the American Rolling Mill Company, will build 100 dwellings immediately, according to an announcement accredited to J. Claire Miller, manager of the Ashland division of the company. The Boyd County Realty Company, capitalized at \$300,000, has been incorporated for the purpose of handling the construction of these dwellings.

The new finishing mill at present under construction for the American Rolling Mill Company, is expected to be ready for operation soon after the first of next year, and it is stated that 3000 additional employees will be required.

EUROPEAN DEMANDS FOR AMERICAN COAL HAVE INCREASED.

Effects on Coal Situation in Various Countries of French Occupation of the Ruhr.

The occupation of the Ruhr coal fields by the French, with consequent decrease in its coal production, entailing as it does shutting off supplies to Italy, France, Germany, and other European countries, has caused some increase in exports of bituminous coal, according to reports in the Department of Commerce on the present coal situation.

British colliery owners and coal merchants seem to be unable to supply the increased demand for coal and coke resulting from the Ruhr situation, as not only has their production of coal reached its probable maximum, under existing conditions, but their dock capacity, which is and has been for some time the governing factor in their export trade, is heavily overtaxed. This is due largely to the fact that the British dock labor insisted upon only two 8-hour shifts per day. Strong efforts have been made to put an additional shift, but, so far, with but little success, and the whole matter has now been referred to the Industrial Court, which means a probable delay of six months before the matter can be adjusted.

To show the handicap imposed upon the British export trade by their limited ship-loading facilities, it was publicly stated by the head of one of the largest South Wales coal shippers that, during the past week in February, "out of a hundred thousand wagons (cars) employed in the coal field on the transport of coal from pit to port, no less than 70,000 of them loaded with 700,000 tons of coal are standing at the collieries, sidings, and docks waiting shipment." The same authority also declared that 450 vessels, with a carrying capacity of about 400,000 tons, were at the South Wales ports waiting for that coal.

Information received from the Commercial Attache of the Department of Commerce, at London, dated February 15, speaking of the Scotch coal situation, was to the effect that on that date there were 94 vessels waiting at the chief Scotch ports, 70 of them on the East Coast.

British coal exports for January were 5,611,670 gross tons, as compared with 6,070,318 tons in January, 1913; 5,794,770 tons in January, 1914, and 4,020,935 tons in January, 1922.

British production is now ranging from about 5,567,000 to 5,644,000 tons per week, compared with an average of 5,520,000 tons per week in 1913, the year of greatest production; the total production for 1922 was 259,839,000 gross tons, as compared with 286,729,000 tons in 1913.

For the year 1922, British exports were 64,198,384 gross tons, as against 24,660,552 tons in 1921 and 73,400,118 in 1913, the record year.

Production in the Ruhr field in past years and up to February 1, 1923, is given in the following tables:

	Metric tons.
1913	114,487,000
1914	98,285,000
1915	86,778,000
1916	94,563,000
1917	99,365,000
1918	96,016,000
1919	71,153,000
1920	84,986,000
1921	91,321,000
1922	93,298,174

MONTHLY PRODUCTION IN THE RUHR COAL FIELD FOR 1922.

	Metric tons.
January	8,152,763
February	7,737,974
March	5,014,278
April	7,512,646
May	8,081,951
June	7,078,361
July	7,854,400
August	8,336,773
September	8,265,688
October	8,827,126
November	8,536,214
December*	7,900,000

Total

*Estimated.

For January, 1923, no figures are available, but it is estimated that it was 25 per cent below December; for February the estimated production was 33 per cent of the December output.

In 1922, the total Reparation deliveries amounted to some 18,000,000 tons, as against the demands of the Reparation Commission for 22,279,000 tons, while the total output of the German coal field in 1922, outside of lignite, amounted to 130,664,000 tons.

There is a great demand in Belgium for coke and coking coals. The Belgian coke ovens are producing only about 70 per cent of their normal output, owing to the lack of suitable coal. None is being received from the Ruhr and the British coking coals can not be obtained in sufficient supplies, although in 1922, British exports to Belgium increased to 3,489,419 tons from 618,066 tons in 1921.

Since the 19th of January, very little coke or coal has been imported from Germany, causing a greatly increased demand for the British product, which, however, can not be secured in any increased amount. This has made it necessary for French buyers, including the Government, to make inquiry in this country for both coal and coke. France is particularly short of coke and coking coal, reducing metallurgical production, as the supply available is absorbed by contract requirements. A great number of blast furnaces are reported as now being blown out owing to the lack of coke. British coke is now costing about 240 francs per metric ton, c.i.f. Dunkirk.

British coal exports to France in 1922, were actually in excess of those in 1913 and twice as large as in 1921, as shown in the following table:

	Gross tons.
1913	12,775,909
1921	6,395,651
1922	13,479,417

For the past year, Italy's coal requirements have been taken care of by the import of British coal, supplemented by that received from German original sources. Now, however, Italy is looking to this country, especially for gas and coking coal, as shown by inquiries and the actual closing of a fairly large tonnage over the next three months.

Germany is apparently in urgent need of large tonnage of industrial coal. For the past year, she has been purchasing increased quantities in England, as shown by the following figures of British exports to Germany:

	Gross tons.
1913	8,952,328
1921	817,877
1922	8,345,606

There is also a considerable tonnage of coal from Great Britain that reaches Germany through Holland and it is significant that British exports to Holland increased from 1,787,678 tons in 1921, to 6,067,789 tons in 1922.

Inquiries have been received here for coal for Germany, one sale of 200,000 tons, over four months, has been reported as closed.

As a result of the European situation, Sweden has also asked for quotations on coal suitable for locomotive fuel, but as far as is known, no actual sales have been made.

There is no increased movement this year in the export of British coal to the countries involved, but there is a pronounced weakening in the iron and steel trades in Germany, Belgium and France, as a result of the closing of plants from lack of fuel.

Owing to the increased demand in Europe, British exporters have cut down their shipments to South America, exports to Argentina having been decreased from 308,078 tons in December, 1922, to 207,786 tons in January, 1923, with a probable further decrease in February.

Some inquiries for United States coals have been from Brazil and the Argentine although but little actual business

has resulted up to this time, two boats have been fixed recently, it is reported.

To-day (March 13) Navy Standard Pocahontas-New River coals are bringing \$7.25 to \$7.50 per ton, f.o.b. Hampton Roads; gas and by-products coals \$6.35 to \$6.50.

Fairmont gas coal, shipped from Baltimore, is now selling at about \$5.50 f.o.b. piers for run-of-mine and \$6.25 for screened lump.

Last week's price for best admiralty Welsh coal for future shipment was 32s. 6d. or about \$7.65 per ton f.o.b. Cardiff, the higher volatile Monmouthshire large coal from 30s. to 31s. 6d.

At prevailing ocean freight rates, admiralty coal would cost c.i.f. Hamburg, at least 42s. or \$9.87, as against \$10.15 for the best Pocahontas-New River coals, the latter figure based on \$7.25 per ton f.o.b. Hampton Roads and \$2.75 ocean freight. The best high volatile gas and locomotive coals from Hampton Roads could be delivered at Hamburg at about \$9.40 per ton.

As a result of the European conditions, from February 20, to March 12, some fifty-two steamships have been closed for our Transatlantic coal and coke trade, at rates varying from \$2.40 to Rotterdam, to \$3.50 to West Italy for coal; indications point to an increase in these rates and it is expected that they will reach higher levels, as sharp advances in coal freights from South Wales to other countries have already been made. Of the fixture mentioned, 14, were for West Italy and 28 for Rotterdam-Antwerp.

The export inquiries now being received are principally for gas, coking coals, locomotive coals and coke; current supplies at tidewater are hampered by car shortages.

WIDESPREAD PROSPERITY SOUTH.

President Warfield, of the Seaboard Air Line, Gives Facts About Florida, Alabama, Georgia and the Carolinas.

S. Davies Warfield, President of the Seaboard Air Line Railway, returning from an inspection trip over that line, states that he has never seen such prosperity in the South as indicated in the increase in traffic, both passenger and freight, as at present. Mr. Warfield said that the Seaboard Air Line is compelled to run its passenger trains in two sections, to take care of the Florida travel especially, and their Limited train service was extended a month longer than ever before. His inspection not only covered the main lines of the Seaboard but branch lines as well. Jacksonville, Tampa, St. Petersburg, Sarasota, Orlando, contiguous territory and other points were included. The Lake Wales territory in the interior of Florida, which includes the well known ridge section of Florida, the highest in the State in altitude, reaching 325 feet, Mr. Warfield states shows wonderful development, in the orange groves and residential sections especially. In order to reach outlying points, Mr. Warfield automobilized 300 miles to get an idea of the development going on.

"At St. Petersburg," said Mr. Warfield, "the advancement is phenomenal. In 1900, there were 400 people at this place; now the permanent population is 35,000, with a floating population during the winter season—and it is a long one—of some 60,000. The hotels are overcrowded, two new hotels are now being erected, one to cost \$1,500,000, the other \$1,000,000. The Bellview Hotel at Belleair (Clearwater) anticipates increasing its capacity by some 300 rooms. The hotels and boarding houses in this entire section are overcrowded.

"In the center of the State, at Sebring and other points, the same conditions obtain. Orlando is completing the Angebilt Hotel at a cost of some \$2,000,000. On the Palm Beach side, as is well known, the season has been remarkable, the railroads not being able to secure Pullman equipment sufficient

to properly take care of the people. The hotels here are crowded as in the other sections.

"Florida is a great state and the problem now is to supply the necessary railroad facilities to take care of it.

"Through the Carolinas the improvement is marked, as it is through Georgia and Alabama. Textile industries in the East are looking to establishing branches in various sections of Alabama, Georgia and the Carolinas. The vegetable section is likewise prosperous to a marked degree. Where ten years ago from Hamlet, N. C., to Savannah, Ga., the country was uncultivated, today there are few spots outside of the forest lands that are not under cultivation, indicating remarkable improvement.

"Throughout the territory traversed by the Seaboard Air Line there is indicated great growth and the outlook is most satisfactory.

"The freight car loadings of the Seaboard are at present the largest in its history," said President Warfield in conclusion. "This is reflected in the present gross of the company. The expenditures, however, have been large to bring the equipment to its present state of efficiency, especially through the rebuilding of a very large percentage of the railroad's freight cars under standardized plans. Large additions have been made during the past twelve months in new freight cars and locomotives."

British Cotton Exports.

Manchester, England, March 13.—[Special.]—Cotton yarns and manufactures shipped from the United Kingdom during February amounted to £14,526,189, or 33 per cent of the total for manufactured articles of £44,324,417, while the comparative figures for February last year were £13,446,450 and £47,999,960, respectively. For the two months ended February cotton exports were valued at £31,105,390, and the total value was £97,459,024, compared with £30,259,866 and £99,824,043, respectively, for the corresponding period of 1922.

The February shipments of cloth amounted to 342,558,500 square yards, of a total value of £11,521,123, being an average price of 8.07d per square yard. The total square yardage exported for the two months of January and February amounted to 742,546,700, compared with 591,072,200 for the similar period of last year. The largest consumers, with the increase or decrease compared with a year ago shown in square yards, were:

Country.	Total Yards Cloth.	Increase.	Decrease.
India	289,197,900	145,035,900	
Australia	34,598,900		792,000
China (Inc. Hong Kong) ..	33,783,200		25,705,000
Egypt	30,434,100		5,453,000
Argentine Republic	28,245,200	3,404,000	
United States of America ..	28,070,900	6,792,000	
Dutch East Indies	23,029,900		8,594,000
Switzerland	21,462,200		1,654,000
Iraq	19,348,900		4,092,000
British West Africa	18,120,500	2,259,000	
Canada	12,676,000	4,229,000	
Straits Settlements and Federated Malay States ..	11,965,600	776,000	

A total of £1,537,555 was absorbed by the exportation of 10,881,600 lbs., of yarn during February, an average of 33.91d. per lb. For the two months ended February the total weight was 23,606,300 lbs. The takings of the principal markets, with the increase or decrease against the corresponding period of 1922 shown in lbs., were:

Country.	Total Pounds Yarn.	Increase.	Decrease.
Netherlands	6,311,300		1,721,000
Germany	4,167,200	1,452,000	
India	2,628,600		4,937,900
United States of America	1,248,600	490,000	
Switzerland	995,400		283,000
Argentine Republic	934,800	347,000	
Belgium	779,000		85,000
Bulgaria	702,300	523,000	

VAST COAL DEVELOPMENT PENDING IN KENTUCKY.

Ford Interests Purchase Additional 120,000 Acres at Cost of Over \$3,000,000—Virgin Lands Offer Reserve Supply of 500,000,000 Tons—500,000,000 Feet of Timber Available.

Presaging a stupendous development of coal lands in Kentucky, the Ford Motor Company of Detroit has purchased from the F. S. Peabody syndicate of Chicago, about 120,000 acres of virgin lands in the southeastern section of that state at a cost of between \$3,000,000 and \$4,000,000. Added to the holdings already acquired, this latest acquisition gives the Ford interests a total acreage of 165,000.

According to Associated Press dispatches, official announcement has been made in Detroit that the purchasers come into possession of lands with a reserve coal supply of 500,000,000 tons, and from these holdings it is expected that within a year a sufficient supply of coal will be obtained for supplying all the Ford factories in every part of the country; all the factories and mills manufacturing various products for its own plants; as many of the industries in the district as care to buy coal from the Fords; and have left fuel sufficient to supply a part of the domestic demand of the country.

Mr. Ford, it is said, will ask all industrial users of his coal to install furnaces that will remove only the gas and similar substances, leaving a fuel unimpaired for domestic purposes, which would be sold for heating homes. It is explained that the fuel remaining after the gas had been taken out, would be even more valuable for heating than it was before.

In addition to its plans for the coal development, it is stated that reforestation will also be carried out on the properties. The holdings are estimated to contain 500,000,000 feet of timber available for development, but it is said the timber resources will not be developed at this time. It is the plan of the purchasers to use the surface of the ground for scientific research work and experiments in reforestation while the coal mines are being developed.

With this latest purchase, the new owners now have five pieces of property, on which are at present 10 large mines and 22 openings.

Asked as to its plans for the development of the properties, the Ford Motor Company wires the MANUFACTURERS RECORD: "Have no information to give regarding plans for development coal and timber lands purchased from Peabody syndicate."

Government Report on Cotton Goods Manufacture for 1921.

The Department of Commerce announces that reports made to the Bureau of the Census show a decrease of about 40 per cent in the value of products of establishments engaged primarily in the manufacture of cotton goods in the year 1921 as compared with 1919, but an increase of 89 per cent over the pre-war year 1914. There were also decreases from 1919 to 1921 in the number of persons employed, in the total amount paid during the year in salaries and wages, and in the cost of materials used. In the quantities of the various kinds of goods produced, many increases as well as decreases are shown, resulting in very little difference in the aggregate quantity reported for 1921 and for 1919.

Of the 1329 establishments reporting for the industry in 1921, 344 were located in North Carolina; 182 in Massachusetts; 154 in South Carolina; 125 in Georgia; 124 in Pennsylvania; 73 in Rhode Island; 64 in Alabama; 46 in Connecticut; 44 in New York; 27 in New Jersey; 19 in Texas; 17 in New Hampshire; 16 in Tennessee; 15 in Maine; 14 in Maryland; 13 in Mississippi; 10 in Virginia; 8 in Illinois; 6 each in Ohio and Wisconsin; 5 in Kentucky; 4 each in

Indiana and Vermont; 3 in Louisiana; 2 each in Arkansas and California; and 1 each in Michigan and Missouri. Massachusetts was the leading state in the industry in 1921 and produced 25 per cent of the total value of products in that year.

In December, the month of maximum employment, 445,379 wage earners were reported, and in January, the month of minimum employment, 375,245—the minimum representing 84.3 per cent of the maximum. The average number of wage earners employed during the year was 412,486, as compared with 430,966 in 1919 and 379,366 in 1914.

Statistics for 1921, 1919, and 1914 are summarized in the following statement. The figures for 1921 are preliminary and subject to such change and correction as may be found necessary from a further examination of the original reports.

	1921	1919	1914
Number of establishments	1,329	1,278	1,168
Persons engaged	425,758	445,423	338,726
Proprietors and firm members	240	239	409
Salaried employees	13,032	14,218	8,951
Wage earners (average number)	412,486	430,966	379,366
Salaries and wages	\$364,434,000	\$392,839,000	\$161,680,000
Salaries	35,991,000	37,364,000	15,550,000
Wages	328,443,000	355,475,000	146,130,000
Cost of materials	708,094,000	1,277,786,000	431,603,000
Value of products	1,279,168,000	2,125,272,000	676,569,000
Value added by manufacture	571,074,000	847,486,000	244,966,000

Cobb Island Development to Cost About \$500,000.

An important development to be undertaken on the Maryland side of the Potomac River has been inaugurated by the Cobb Island Development Company, recently organized by F. B. Bannister, of Baltimore, and Robert Crain of Mount Victoria, Md. Plans of the company involve the development of Cobb Island which embraces an area of 344 acres having 8 miles of water front.

It is planned to make available for building purposes 1500 sites, on a portion of which the company will erect dwellings, a hotel, etc. Golf links and tennis courts are planned.

A bridge connecting the island with the Crain Highway, at present under construction, will be built, together with bulk heads, roads and sidewalks. The installation of septic tanks is also under consideration.

Large Sales of American Farm Machinery in Mexico.

Monterey, Mexico—More American farm machinery and implements have been sold in Mexico this season than during any corresponding period for the last fifteen years, according to dealers of Monterey and other cities of the country. Vast areas of farm lands formerly productive of good yields of various crops are now about to be cultivated again after a long period of idleness. This is true not only of the territory around Monterey but also of all other parts of the country.

Will Let Contract Soon for \$500,000 Hotel.

Austin, Tex.—Plans are ready for the proposed \$500,000 hotel to be erected in this city by the Baker Hotels, Inc., and construction bids will be opened about April 10. The building will be 92 by 160 feet, 11 stories, of concrete steel and brick construction, with reinforced concrete floors, roof and foundation.

Sanguinet, Statts & Hedrick of Fort Worth, are the architects.

St. Anthony's Hospital to Cost \$250,000.

Louisville, Ky.—Contract has been awarded to J. T. Russell & Co., of Louisville, for the addition to St. Anthony's Hospital here, which will cost about \$250,000. The addition will be 4 stories and basement, accommodating 100 beds and will include a training school for nurses, together with maternity department and other facilities.

D. X. Murphy & Brother of Louisville, are the architects.

Lumbermen in Annual Convention at New Orleans Manifest Keen Interest in National Problems as Well as in Questions Affecting Their Own Industry.

New Orleans, La., March 24.

The eight annual meeting of the Southern Pine Association opened in this city on Wednesday of this week with an attendance which broke all previous records, for besides several hundred leading lumber manufacturers of the South there were in attendance hundreds of other lumbermen from all parts of the United States who attended as delegates the annual meeting of the National Lumber Manufacturers Association. The meeting was marked throughout by more than ordinary enthusiasm and the various addresses and papers were received with the greatest manifestations of interest.

In the address of the president, John H. Kirby of Houston, Tex., the duty of good citizenship was expounded and a warning issued against those evils in public life which Mr. Kirby declared are menacing the principles upon which this nation was founded and the stability of its institutions. Mr. Kirby said:

"For more than ten years I have been sounding a note of warning to our fellow countrymen that the free institutions bequeathed to us by our forefathers and thriving under the free government which they instituted among us were being gradually undermined and that in the course of human events if some action were not taken to stay the hand of its enemies this republic would be subverted.

"I do not seek to stir up strife nor to engender nor promote animosities. All who know me know that I am by nature a peacemaker, that I am neither malevolent nor belligerent; that I stand four-square for the right as God gives me understanding to know the right; that my voice, my time and my energy are constantly devoted to promoting the public welfare and the preservation of those eternal principles which must control if America is to be populated by a prosperous and happy people.

"We shall oppose all organizations which assail these principles and to my mind we would be lacking in devotion to our country; lacking in loyalty to the flag; lacking in fidelity to the trust which our forefathers transmitted to us under the constitution if we did less than to strive at all times to transmit that legacy to posterity unimpaired and do our part as citizens at all times to render this government safe and secure throughout all the cycles of time."

Mr. Charles S. Keith, president, Central Coal & Coke Co., of Kansas City, Mo., predicted an era of general prosperity for the country with the lumber industry especially strong and the farmer coming back into his own. He presented facts and figures pertaining not only to the lumber industry but touched also upon the general business outlook for this country for the immediate future and predicted that the building of homes would continue active throughout the year, that the railroads would require an unusually large amount of lumber for general improvement and equipment purposes for a long period, that the labor supply would probably be inadequate soon especially in the building lines, and that the mills would be taxed to capacity production for their output. He urged that the present be regarded as the proper time to inaugurate building operations.

Mr. Keith predicted that lumber production in the South for the next five years is likely to be insufficient to meet requirements and that those who hesitate to build awaiting lower prices are likely to be disappointed, as the law of supply and demand would prevent any decrease in values. In summing up his review of the situation Mr. Keith said:

"With prospects for a large demand from the railroads for car material as well as supplies for maintenance of way; from the agricultural sections for improvements and betterments; from industry for manufacture of implements, boxing, crating, furniture, and many other purposes, and from foreign countries, which will increase and become accentuated with

a more settled European situation; in face of labor losses through emigration; demand for labor from new industries; diversion of labor from the older industries, together with loss of production on account of labor shortage; increased production costs as well as increased wages and increased purchasing power for the laboring classes; greater demand for farm products from labor, resulting in increased prices for such production with the consequent increase in the purchasing power of the farmer, the depletion of Southern pine production and the slow provision of new western production, it seems to us that we are entering into a period such as we experienced in 1919 and 1920."

In conclusion he declared that the danger of the situation to manufacturers and others is that the demand for commodities might result in another inflation and that the same power which halted production, brought about deflation and impoverished men, might again be used in the same way and he warned against such recurrence.

Secretary Hoover's views on the subject of lumber standardization were presented in a message which was read by William A. Durgin, chief of the division of simplified practice of the United States Department of Commerce. Mr. Hoover emphasized the desire of the Department to co-operate through the machinery of the lumber trade itself as a matter of self-government in the trade and stated that he was opposed to any attempt to extend the arm of government. On the other hand, said he, the proper solution of these questions, so vital to the stability of our national industrial fabric, could be greatly strengthened through proper government support to the efforts of the trade. Mr. Durgin in the illustrated address which he delivered on his own account, dealt with the necessity for the standardization of lumber in sizes and grades.

At the annual banquet on the evening of March 21 Mr. Harry F. Atwood of Chicago, in the course of an enlightening and inspirational address, the central theme of which was "Get Back to the Constitution," said:

"Representative government, individual property rights, individual responsibility for individual conduct, provide the governmental bases for orderly progress. Direct action, paternalistic tendencies, class consciousness, class agitation, and class legislation are the certain road to hopeless chaos."

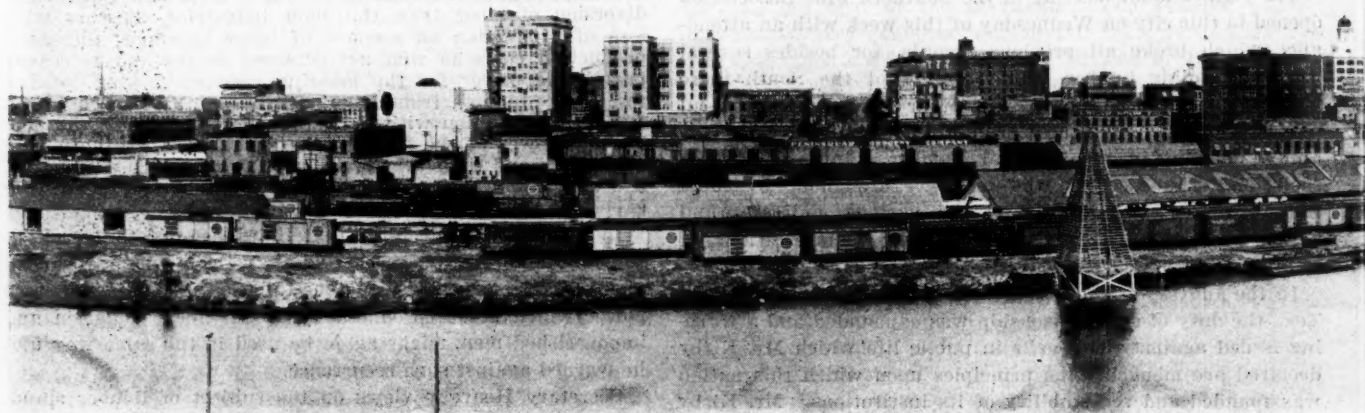
At the closing session of the National Lumber Manufacturers Association on Thursday a resolution presented by Representative Sydney Anderson of Minnesota was unanimously adopted providing for the organization of a National Transportation Institute. Its object would be the study of transportation, and its support would come from voluntary subscriptions from those interested in maintaining the economic structure of the United States against radicals and faddists. The attitude toward the railroads would be one neither of hostility nor of undue friendliness, the sole object being to get the facts.

A declaration of principles with respect to reforestation submitted by George S. Long, chairman of the forestry committee, was adopted, setting forth in detail the views of the lumber manufacturing industry.

Chairmen were renamed, also the directors with the exception of H. C. Hornby who succeeded A. J. Taylor of the Northern Pine Association.

John W. Blodgett of Grand Rapids, Mich. was re-elected president and the following officers were re-elected for the ensuing year: A. L. Clark, Dallas, Tex., first vice-president; R. W. Vinnedge, North Bend, Wash., second vice-president; F. G. Wisner, Laurel, Miss., third vice-president; John H. Kirby, Houston, treasurer, and Dr. Wilson Compton, Washington, secretary and manager.

PANORAMIC VIEW OF TAMPA, WHERE EXTENSIVE



The Citizens of Tampa, Fla., Voted Bonds Last Year for \$600,000 to be Used for Municipal Piers, Warehouses, and Terminal Rail W. W. Hall, Port Engineer. The Contractors on the Work are Edwards & McGucken of Tampa. It is Planned to Construct Docks

Developments for St. Petersburg Include \$750,000 Casino—To Lay Out Townsite and Develop Sub-divisions.

St. Petersburg, Fla.—The development of 3000 acres of land located between St. Petersburg and the bridge head of Gandy Bridge, now under construction, has been announced. The property is owned by J. M. Elliott, one of the promoters of the Gandy Bridge, N. J. Upham and C. Perry Snell, who will undertake the development. There is 20 miles water front.

Mr. Elliott plans to construct a \$750,000 casino with the various features that accompany an enterprise of this kind, including an 18-hole golf course and acre estates for winter residents. It is the purpose of Mr. Upham to lay out a town-site and develop sub-divisions on his holdings, while Mr. Snell, who owns the Coffee Pot golf courses of 27 holes, will build an additional 9 holes and improve a sub-division of 300 lots.

The three owners will connect Coffee Pot Bayou, Smack's Bayou and Pappy's Bayou, together with several inland lakes, with a system of canals and lagoons. One of the features of this phase of the development will be a boat livery which is planned by Mr. Snell.

Over \$10,000,000 for Improvements to North Carolina Public Buildings in 1923-24.

Raleigh, N. C.—Notable provisions of the recent session of the North Carolina legislature for further permanent improvements of public institutions during 1923-24, include the following: State Hospitals for the Insane: at Raleigh \$394,000, at Morganton, \$415,000, at Goldsboro, \$315,000; Caswell Training School for the Feeble Minded, at Kinston, \$500,000; School for the White Blind, at Raleigh, \$326,000; School for the Deaf, at Morganton, \$23,000; Orthopedic Hospital at Gastonia, \$25,000; State Tuberculosis Sanatorium, near Aberdeen, \$219,000; Stonewall Jackson Training School, for white boys, at Concord, \$135,000; Samarcand Training School, for delinquent white girls, in Moore County, \$232,000; State University, at Chapel Hill, \$1,650,000; State College of Agriculture and Engineering, at Raleigh, \$1,350,000; State College for Women at Greensboro, \$1,350,000; East Carolina Teachers College, for Women at Greenville, \$1,025,000.

000; Agricultural and Technical College (colored) at Greensboro, \$455,000; Normal schools, five, \$1,194,000; State Agricultural building, at Raleigh, \$225,000, of which \$125,000 is for a new State Museum; Negro Reformatory, \$50,000; White and Negro Criminal Insane, \$100,000, (two buildings). This totals \$10,144,000.

The legislature has also provided \$500,000 for the development of its fisheries. This will include the deepening of several inlets from the ocean to the sounds so fish can enter; oyster planting on a large scale in the sounds; the stocking of mountain streams with fish; the establishment of fish hatcheries, etc.

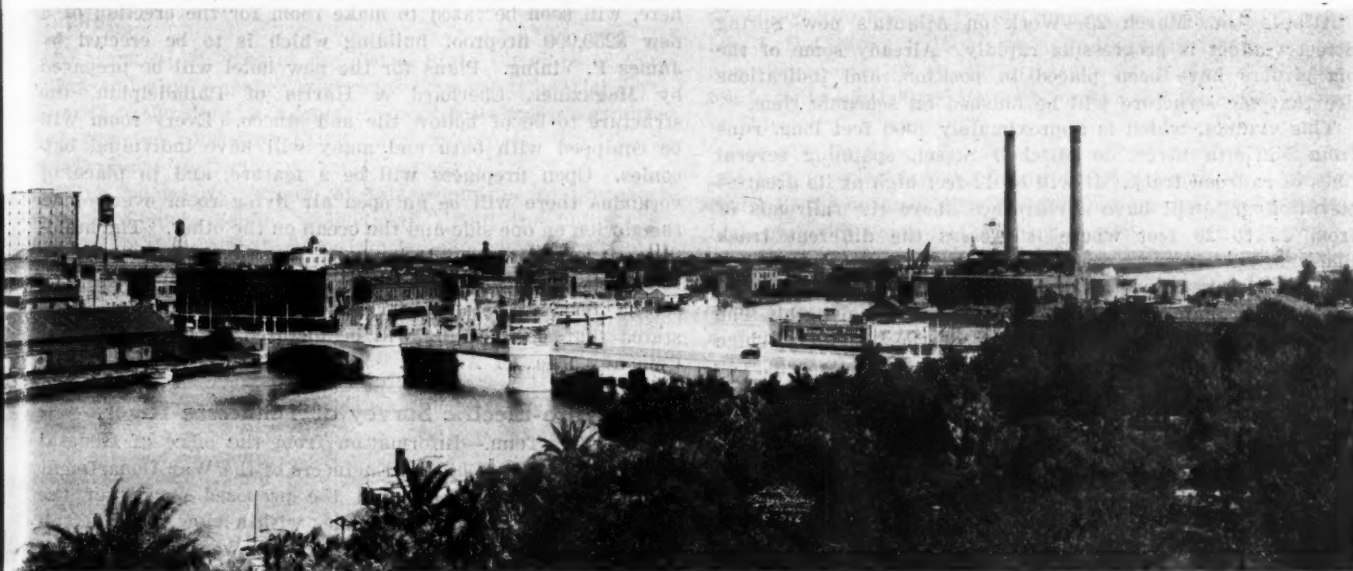
Iron and Steel Blue Book.

The sixth edition of the National Iron & Steel Blue Book now in course of preparation by the publishers R. L. Polk & Co., of Pittsburgh, will be issued this year. It is revised and improved as compared with the fifth edition, which in itself in an exceedingly comprehensive directory containing an authentic and concise list of firms, corporations and individuals engaged in the production of iron and steel in the United States and Canada, names of plants operated, their location, description, their equipment, products, etc. There is also a classified department of patrons which embraces a great variety of data useful to everyone interested in iron and steel business. One of the most valuable features of the book is an alphabetical index of proprietors, directors, officers, managers, sales managers, purchasing agents, superintendents, etc. whose names are arranged in alphabetical order together with the names of the companies or firms with which they are connected, their respective official positions being stated in the detailed descriptions of the various concerns. This directory is printed on heavy paper and is substantially bound, the presswork being excellent and the type large and clear, making reference easy and rapid.

Plan Large Zinc Smelting Plant Near Tampico.

Tampico, Mexico—The International Ore and Smelting Company of Monterey and Saltillo has notified the government authorities of its plans to construct a large zinc smelting plant at Dona Cecilia, a suburb of Tampico. This company does a large export business of zinc ore from its mines in the States of Tamaulipas and Nueva Leon.

TERMINAL IMPROVEMENTS ARE NOW UNDER WAY



Connections. Work Has Been Under Way for Several Months on the Municipal Piers in the Estuary, Under the Supervision of A. Around Both Sides of the Slip, and Storage Buildings 870 x 75 Feet Will be Erected.

New Type-Casting Machine Developed in Baltimore.

The Supertype Corporation.

Baltimore, Md., March 15.

Editor, Manufacturers Record:

You may be interested in having your attention called to what will ultimately prove a new industry for the city of Baltimore and in our opinion, a rather important one.

We have produced a new composing and type-casting machine, which has taken eight years to develop. It has a type range of from four and one-half point pica to 36-point type. It does the work of both the single line type-casting machine and the single character type-casting machine, the functions of neither one being embodied in the other and its product is a superior combination of both. Its automatic tabulating feature permits an instantaneous change in the length of the line, an arrangement not heretofore developed. The machine has 25 per cent fewer working parts, occupying ten square feet less floor space, and with a speed of ten lines a minute. Moreover, it has a 100 per cent larger capacity metal pot, gives uniform temperature and makes possible the casting of a superior slug of metal type from harder type metal which assures thousands of more perfect copies.

The Supertype Corporation has been in operation since 1914, and recently increased its capitalization to \$5,000,000. The inventor of the new machine is Frederick W. Letsch of Baltimore, a mechanical engineer familiar with every phase of the type-casting, matrix making, mechanical composing and typographical business. The machine is covered by over 250 patents and claims, granted in the United States, Canada, England, and other foreign countries. It may be seen in operation at the experimental shop of the corporation, on the northwest corner of Pratt and Gay streets, Baltimore.

H. L. CLAPHAM, Engineer.

Humphreys Pure Oil Company's Refinery.

Beaumont, Tex.—In an announcement of the plans of the Humphreys Pure Oil Company for the construction of an oil refinery near here William Paul Gage, vice president of the company says:

"The refinery will contain 26 process cracking units along with other specially designed features and advanced devices and processes which the company engineers have been working on for a long time.

"Approximately 600 acres of land was the original purchase

at Smith's Bluff, the site of the proposed plant, but an additional 150 acres has been recently purchased in order to assure adequate ground space for such a big project. There are already thirty-one 50,000-barrel tanks on this site and with the erection of the refinery ten more similar tanks and numerous other smaller tanks will be built.

"Wireless stations to facilitate the handling of, shipping and disposal of the products of the refinery will be installed immediately and numerous additions to the proposed plant may be made during the course of construction."

Review of Gas and Electric Business.

The Consolidated Gas, Electric Light & Power Co., of Baltimore, has issued in the form of a "Year Book," a most interesting review of its operations during 1922. Since 1910 the company has sent to its stockholders regularly each year an annual report, but this new publication shows a broadening of its publicity work, and the annual reports will also continue to be published. There are 10,375 stockholders, a majority of whom live in Baltimore and adjacent territory. The wide use which is now made of gas and electricity for lighting, heating, power and other service makes the book one of more than ordinary interest. The company is a lineal descendant of the Gas Light Company of Baltimore, which was granted a franchise in 1816 and was the first corporation of its kind in America, those interested in the original company including Rembrandt Peale, William Lorman, James Mosher, Robert Cary Long and William Gwynn, all of whom were active in the business affairs of the city. Peale's Museum on Holliday St., between Saratoga and Lexington streets, was the first building to be lighted with gas. It is now stated that the increase in the use of gas during the six years 1917-1922 was as great as the growth in the 100 years from 1816 to 1916. The use of electricity by the mass of the population is comparatively recent, as we all know, but the company says that since 1912 there has been an increase of 485 per cent in the annual sale of electric current, sales totaling last year more than 501,000,000 kilowatt hours. The total gross income of the company during 1922 was more than \$20,300,000; net income over \$5,500,000, and surplus after dividends, over \$2,500,000, the net increase in corporate surplus for the year being over \$1,500,000. The "Year Book" is excellently illustrated and presents many other interesting and important facts about gas and electric business. It was prepared under the supervision of Arthur W. Hawks, Jr., editor.

Rapid Progress on \$625,000 Spring Street Viaduct at Atlanta.

Atlanta Ga., March 23—Work on Atlanta's new Spring Street viaduct is progressing rapidly. Already some of the big girders have been placed in position, and indications are that the structure will be finished on schedule time.

This viaduct, which is approximately 1900 feet long, runs from Marietta Street to Mitchell Street, spanning several lines of railroad track. It will be 42 feet high at its greatest elevation and will have a clearance above the railroads of from 22 to 29 feet where it crosses the different track lines.

The girders used are all of different lengths to meet special conditions, ranging from 40 feet to 130 feet in length. The larger girders, which are the work of the Virginia Bridge & Iron Company, of Roanoke had to be transported on three freight cars to each girder, and routed specially so as not to cross any more bridges than absolutely necessary.

The average weight of the girders is 50 tons—sufficient to carry away in crossing all but the most strongly constructed bridges—hence the careful routing.

The viaduct was begun last October, and is expected to be ready for use next October. It will cost approximately \$625,000.00, will be 60 feet wide and will carry a twelve-ton motor truck load, which is about as heavy traffic as it will be called upon to bear.

Harrington, Howard & Ash, of Kansas City, Mo., assisted by M. Robert & Co., of Atlanta, designed the viaduct. The Virginia Bridge & Iron Company and the Nichols Construction Company are the contractors in charge.

The new viaduct will be opened for automobile and truck traffic and will not carry a street car line. It is expected to relieve much of the congestion experienced at present in the downtown section of the city.

Production of Creamery Butter in Georgia Increased 500 Per Cent, Largely Through Operation of Community Creameries.

The production of creamery butter in Georgia has increased 500 per cent during the past year, according to a report recently made public by Frank W. Fitch, specialist in dairy husbandry of the Georgia State College of Agriculture at Athens.

In 1921 the value of creamery butter made in Georgia was approximately \$100,000, the report states. In 1922, its cash value was more than \$500,000—an increase of 500 per cent in the twelve months' period. Indications are that this ratio will be maintained in 1923.

This advance has come about, according to Mr. Fitch, through the operation of community creameries, which have largely replaced old style methods of handling dairy products.

In many small towns, previous to creamery organization, country butter was a drug on the market, selling at from 15 to 18 cents a pound, and with many dealers refusing to handle it at all. Today it is being made up at creameries all over the state, and brings straight market prices.

Through standardizing the product, and making it uniform in color, quality, flavor and package, the co-operative creameries have secured for their patrons twice the amount that could have been secured for the same amount of butter made on the farm.

\$500,000 Bank and Office Building for Tampa.

Tampa, Fla.—Announcement has been made that the Florida Mortgage, Title & Bond Company of this city, of which Mayor Charles H. Brown is president, and which has recently been organized with a capital stock of \$2,500,000, will build a 7-story bank and office building on Franklin street. The structure will be 52 by 105 feet and cost about \$500,000.

New \$250,000 Hotel for Ormond Beach.

Ormond Beach, Fla.—Bretton Inn, one of the oldest hotels here, will soon be razed to make room for the erection of a new \$250,000 fireproof building which is to be erected by James P. Vining. Plans for the new hotel will be prepared by Magaziner, Eberhard & Harris of Philadelphia, the structure to be of hollow tile and stucco. Every room will be equipped with bath and many will have individual balconies. Open fireplaces will be a feature, and in place of verandas there will be an open air living room overlooking the garden on one side and the ocean on the other. The building will be of Moorish design.

There will also be a club house, 62 feet long, 2 stories, the second floor to be used for entertainment features. It is stated that the building will be financed by G. L. Miller & Company, Inc., of Atlanta.

Hydro-Electric Survey of Tennessee River.

Knoxville, Tenn.—Information from the office of General Lansing H. Beach, Chief of Engineers of the War Department at Washington, indicates that the proposed survey of the Tennessee River and its tributaries with a view to the development of navigation and hydro-electric power, will be started at once.

Present plans contemplate a comprehensive survey in Tennessee, North Carolina, Alabama, and Kentucky. Forces are being organized in the office of the Chief of Engineers, and an appropriation of \$200,000 is available for the survey.

Two Additional Oil Refineries for Texas.

Austin, Tex.—According to information received by the oil and gas division of the State Railroad Commission, two more oil refineries are to be built in Texas. One of these will be constructed by the Griswold Oil Company at Electra. It will have a daily capacity of 2500 gallons of gasoline and cost approximately \$500,000. The other will be built at Dallas by the Dallas Refining Company which is being organized by O. F. Kullenberg and associates. It will have an initial capacity of 1000 barrels of crude oil a day.

Awards Contract for \$800,000 Bank Addition.

Houston, Tex.—The First National Bank of this city, of which J. T. Scott is president, has awarded contract to the Central Contracting Company, with offices in Houston, to erect the 9-story Fannin street addition to its bank building at a cost of more than \$800,000. The addition will be 125 by 115 feet, and will be equipped with a marble stairway, as well as elevators. Vaults and safety deposit boxes will be installed.

Sanguinet, Staats & Gottlieb of Houston are the architects.

Contract Let for \$250,000 Masonic Temple at Houston.

Houston, Tex.—Contract has been awarded to Tom Tellepsen of this city to erect a \$250,000 Masonic Temple here for Gray Lodge No. 329, of which Norman Atkinson is chairman of the building committee, and Temple Lodge No. 4, of which G. W. Foster is chairman. The building will be three stories high, fireproof, and of stone construction. Alfred C. Finn of Houston is the architect.

Power Development Planned.

Rocky Mount, Va.—An option has been secured on a site for a power plant and also for back-water damage, by the Light and Power Company of Rocky Mount, R. L. Fisher, manager. This option expires on April 1, when the company expects to take over the property. Development will be deferred until later. It will cover two 300-horse power units, the dam to be of concrete with a transmission line 10 miles long.

State Wide Program for Industrial Development of Texas—Special Efforts Toward Securing Textile Mills.

At a recent meeting of the Texas State Chamber of Commerce at Dallas a plan was presented for the industrial development of the state on a comprehensive scale and a committee was selected consisting of 23 members representing the 23 geographical districts.

It is the state's purpose of this committee to prepare a survey of each district which shall detail the natural resources of the state, the possibilities of each district and to present these opportunities to the public through broad advertising in leading publications.

According to Mr. Burt C. Blanton, an industrial engineer and manager of the industrial department of the Texas State Chamber of Commerce, particular attention will be directed towards securing new textile mills. Mr. Blanton says:

"There are now twenty cotton mills operating in Texas, with a new mill under construction; and plans have already been consummated for new mills at Dallas, Mesquite, and Mexia, Tex., erection to begin in the near future.

"The Texas State Chamber of Commerce is negotiating with interests in the North and East; and is co-operating with the M. L. Cannon textile interests of Concord, N. C.; and L. W. Robert, Jr. & Co., textile mill engineers of Atlanta, Ga., relative to the location of additional mills in Texas. These parties are financially interested in the new mills above mentioned.

"We are preparing a complete survey of the cotton mills operating in the state; and it is expected to have a complete compilation of such data and information very soon.

"We received advices from numerous committees throughout the state that their citizens are ready to aid in financing textile mills in their localities; and a number of Texas cities will subscribe 50 per cent of the total cost to secure mills, where such projects are being directed by expert textile mill owners and operators.

"The Texas Chamber of Commerce backed by local chambers of commerce and cities having no such organizations will soon invite representatives of large financial interests and cotton mill owners from the North and East to visit Texas for a far-reaching industrial tour."

The total membership of the committees to work for the industrial development of the state will be 151. The committees are already completed and represent 17 industrial groups.

English Cotton Trade Directory.

Skinner's Cotton Trade Directory, including lace and hosiery concerns, for 1923 has been issued by Thomas Skinner & Co., 330 Gresham House, Old Broad St., London, E. C., 2, England. This is the first issue of the directory and the publishers, who have had half a century of experience in issuing the Stock Exchange Year Book, the Bankers Almanac & Year Book, the Directory of Directors, etc., say in explanation of its appearance that it was represented to them about a year ago that the English cotton industry was in need of a comprehensive directory. Inquiry verified this conclusion and the compilation and publication of the volume was begun.

There are upwards of 3350 English concerns engaged in cotton spinning and manufacturing and also in producing and marketing laces and hosiery. The book gives a list of these, following it with an alphabetical list of nearly 8000 directors and 1200 managers of the companies. There is also a mill-furnishers section giving names of principal manufacturers of 336 articles which go to constitute a cotton mill. Another list classifies fabrics which number 160, and their leading manufacturers. Still another list gives the names of 6550 international cotton spinning and manufacturing companies. There is also much other valuable information relative to cotton manufacture and distribution. The book has over 1500 pages, is provided with thumb index and is strongly bound in cloth.

13-Story Hotel at Charleston to Cost \$2,000,000.

Charleston, W. Va.—Incorporating with a capital stock of \$2,500,000, the Federal Hotel Company, in which, S. B. Chilton, J. E. Chilton, J. H. Moore and others are interested, has awarded contract to the Ring-Hartman Company of Charleston to build a \$2,000,000 hotel at Dunbar and Kanawha streets in this city.

The site on which the structure will be erected is 207 by 220 feet, overlooking the Kanawha river and close to the center of the business district. The building will be 13 stories high and will contain 424 guest rooms. It will be of fireproof construction, Indiana limestone and brick with limestone cornices, and will be equipped with a fire tower.

On the main floor, there will be a lobby 90 by 100 feet, and a dining room, 60 by 88 feet. The mezzanine floor will contain a ladies' parlor, men's lounge, writing rooms, etc. There will be a ball room, 70 by 80 feet, which may also be used for a convention and banquet hall. Five dining rooms will be located on the second floor, so arranged that they may be converted into one large dining room, 18 by 112 feet. The building will be equipped with three passenger, one service and one freight elevators.

Bertram Cunningham & Company, Inc., of New York, are the architects.

St. Louis' \$5,000,000 Municipal Auditorium Plans.

St. Louis, Mo.—At a meeting of the Municipal Auditorium Advisory Committee subcommittees were appointed to prepare recommendations on features to be embodied in the plans of the municipal auditorium to be erected at a cost of \$5,000,000 from bond issue funds recently voted.

The committees appointed and the chairman are as follows: Community uses, C. G. Rathmann, chairman; convention uses, F. H. Rein; concessions, Thomas H. Glancy; engineering problems, including transportation facilities, approaching and parking facilities for automobiles, Charles M. Talbert; press facilities, E. Lansing Ray.

The local chapter of the American Institute of Architects will handle the details in connection with the selection of the architect.

Glenn Estate's New \$4,000,000 Office Building.

Atlanta, Ga.—General contract has been awarded to the George A. Fuller Company of New York for the erection of the \$400,000 office building which the Glenn Estate will erect in this city. The building will have dimensions of 80 by 90 feet, 10 stories, of fireproof construction with a concrete frame, foundation and floors. It will be of face brick and limestone and will be covered with a slag roof.

Waddy B. Wood of Washington, D. C. is the architect, and Bealer & Biggers of Atlanta, the supervising architects. Thomas W. Marshall of Washington is the engineer. In addition to the general contract, awards have been made to Harry Alexander for the electrical work, and to the Otis Elevator Company for elevators, both of New York.

Will Install \$250,000 Casinghead Plant to Convert Waste Gas Into Gasoline.

Brownwood, Tex.—The Helius Casinghead Company, of Fort Worth has closed a contract with owners of the wells in the north Brown county field to install a \$450,000 casinghead plant which will convert the gas into gasoline. It has been found that 6,600,000 cubic feet of gas go to waste in the field daily, and the installation of the plant will be able to get 10,000 gallons of gasoline out of this amount of gas. The plant will be located about 15 miles north of Brownwood, and the combined output of the local field will then be 900 barrels of oil worth \$2.60 per barrel and 10,000 gallons of gasoline worth 14 cents per gallon.

THE IRON AND STEEL SITUATION

Sustained High Production of Steel Is the Market Feature—Rising Prices—Pig Iron Advances.

Pittsburgh, March 24—[Special.]—There is still a rising tide in steel prices, while in the volume of turnover in the open market there have been decreases for several weeks, or say since the end of February. Production has continued to increase and of late has been at the highest rate since the Armistice.

The basis price on shapes and plates, for late delivery, is up \$2 a ton in the week, being now quotable at 2.35c. Bars remain at 2.25c, minimum. Premiums for early delivery are larger and apply to a greater volume of transactions. It is not uncommon for bars and plates to go at 2.75c, while one mill is offering prompt bars at 3.00c and doubtless expects to get some orders at the price.

Premium business is more common in sheets, the conservative mills being practically sold out through June, the Steel Corporation chiefly at 3.35c for black, 4.35c for galvanized and 4.70c for automobile sheets, while independents generally sold at 3.60c, 4.75c and 5.25 or 5.35c respectively. The independent mills divided into two classes, those that would cover their customers over the second quarter and those that were disposed to hold their prospective production for the premium market. Independent mills representing 70 per cent of the total sheet capacity make monthly reports, the last one showing orders on hand March 1, minus stocks, equal to about seven weeks of production, on an average, some mills being sold much farther ahead and some not as far ahead. Prices as high as 5.25c for galvanized, 7.00c for automobile sheets and 3.25c for automobile sheets are being obtained on small lots for prompt shipment.

While the volume of turnover in the open market has been decreasing of late, say since the end of February, this is no criterion of fundamental conditions as to demand and supply. There seems to be an unlimited demand, while mills are turning down a great deal of the inquiry and thus can claim that the bookings would be much larger if they accepted all business offered. Some of the inquiry they regard as "speculative" in character. They do not mean that the inquirers are speculators rather than regular members of the trade, but that some jobbers and manufacturing consumers are disposed to place orders when they cannot be certain they will really need the material.

Until recently the highest rate of steel ingot production since the Armistice was that of March, 1920, but the production both before and after that month was much less. Even that month's rate has lately been exceeded, while this general period is making a much better showing as to sustained production. Practically throughout the trade it is held that this extremely heavy flow of steel into the hands of buyers will relieve the situation, positively prevent any real scarcity of steel developing, and give the trading market an easier tone at no very distant date.

The general steel situation seems to be rather a puzzling one, for the market demand has proved heavier than expected even in the most sanguine quarters, while at the same time it is being remarked that men should profit by the experience of 1920 and not push things too far, since while 41,000,000 tons of ingots were made in 1920 only 19,000,000 tons had to be made in 1921. There has been considerable criticism, that steel prices are being pushed too high, or would soon be too high should advances continue. Perhaps the best analysis of the situation is that instead of ignoring the lessons of 1920 both sellers and buyers have been trying to profit by the experience. Steel prices rose until the middle of August, 1920. In July some sellers appeared to be losing because they had

sold their steel too soon, while some buyers appeared to be losing because they had not bought soon enough.

If sellers are more reserved about selling and buyers are freer about buying, naturally a strong market results, but the final outcome must depend on the relation between the supply of steel and the ability of the country to consume steel. For consuming steel or putting it into service involves a great deal of work. It will be a matter of labor supply this spring and summer. In this matter the steel mills have gotten the start on the contractors doing outdoor work, for they have filled their forces during the winter and have reached a high rate of production. Furthermore, a mill once started and gotten into smooth running order can proceed with fewer men than were required to get it going right. The trade thinks it altogether probable that there will be another wage advance in the steel industry, probably effective April 1, and has considered the possibility of there being another still in midsummer. Apparently then the limiting matter of labor supply will affect the consumption of steel more than its production.

Pig iron in the valley market has easily scored an advance of a dollar a ton in the week, Bessemer, basic and foundry all having sold in the past few days at \$31, furnace. Asking prices generally are higher now, and \$32 may be the market a week hence. As the great bulk of the second quarter tonnage was sold before the market went above about \$28, the chief advantage to sellers in the higher prices now being developed is in furnishing a basis for third quarter trading when the time comes.

In a well informed quarter it is estimated that between 75,000 and 100,000 tons of coke has already gone out on this export movement, chiefly from the Connellsville region, prices being \$7.25 to \$7.50. Inquiry continues. A belated second quarter contract, for a merchant stack in the Mahoning valley, went at not under \$7.50, while the general movement, already reported, was at \$7.00, with perhaps one-fourth of the total at \$7.25.

Many Sales of Pig Iron Into Third Quarter—Belief Strong That Present Activity Will Continue Through Year.

Birmingham, Ala., March 26—[Special.]—Selling into the third quarter of the year is well in hand now and furnace interests of the Birmingham district feel confident that the activity that has been on now for the past few months will be felt through the better part of 1923 if not into next year. Sales are being consummated right now in lots ranging from 150 to 500 tons with an occasional 1000 to 5000 tons lot. Consumers are openly advising that they are purchasing for their needs on business already in hand. Pig iron prices in this section have established a base of \$27 per ton, No. 2 foundry, 1.75 to 2.25 per cent silicon, with further inclination of an upward turn. Declarations on the part of furnace interests here are to the effect that a runaway market is to be deplored. Other sections have been sounding out a \$30 per ton price before the advances will stop. The law of supply and demand will regulate.

The make in the Birmingham district continues reaching out for the peak. The second furnace of The Alabama Company at Gadsden, is producing well, being blown in 10 days ago. The Sloss-Sheffield Steel & Iron Company has announced that its sixth blast furnace will be blown in during the coming month and the schedule calls for the Old Oxmoor furnace of the Tennessee Coal, Iron & Railroad Company also resuming operations, the repairing of the iron-maker now being rushed. The Woodward Iron Company has a fifth furnace ready for the torch but the coke needs are heavy. The

Republic Iron & Steel Company also has a furnace ready but raw material supplies is the problem.

Inquiries for pig iron come from all directions, even from sections in close proximity to blast furnaces. Expectations are that the month of April will see almost a complete absorption of the probable make of the third quarter of the year, despite the steady increase in the output. The railroads are purchasing new equipment and locomotive power right along and as soon as delivered, the rolling stock is placed in service. Hope is expressed that much of this new equipment will be in service while the present activity is still on.

Some of the larger consumers of pig iron recently purchased quite liberally in this district. A cast iron pipe interest took on 25,000 tons for delivery during the last three quarters of the year. A sanitary supply company took on 5000 tons, delivery through the third quarter.

The various Southern industries melting pig iron are taking on new business in volume and a few are sounding warnings again as to overcrowding of plants. One of the active pressure pipe making companies fearing a runaway market is urging holding off purchasing of cast iron pipe where it is on a speculative basis, only such needs as the emergency demands being suggested.

The activity of the pig iron and steel market is spreading and all commodities of the industrial section of Alabama are in sharp demand.

The coke market is so strong that producers are now moving with caution. European business was handled lightly, less than 20,000 tons being reported sold by this district for export to Rotterdam and from that point to be distributed. Even the Sloss-Sheffield Steel & Iron Company with its big surplus stock of a few months ago, has sold steadily therefrom and announces now that there must be conservation of its coke resources for the reason that six furnaces will require great tonnages of the product and its business already in hand will have additional requirements. There are some furnace companies buying in a little coke for their own needs. Prices have been ascending again lately, some small lots of spot coke having sold at \$9 per ton. The average price ranges between \$8 and \$8.50 for foundry coke and the inquiries are as numerous as for pig iron and from all directions.

Charles De Bardeleben has been elected president of the Alabama Fuel & Iron Company, one of the larger, active independent coal companies of the district, succeeding J. M. Overton, who was killed in an automobile accident in Nashville, Tenn. a few months ago.

Coal production in Alabama is only hampered by the railroad car supply. The production is averaging between 375,000 to 385,000 tons per week.

The Imperial Railways of Japan has placed another order, 10,000 tons, for steel rails, the product to be shipped from the Ensley mills of the Tennessee Coal, Iron & Railroad Company.

The new plant of the Phoenix Portland Cement Company at North Birmingham will be making cement in April, at least 60 days earlier than was anticipated. It will ultimately produce 1,500,000 barrels of cement annually.

Quotations for pig iron and iron and steel scrap follow:

PIG IRON

No. 2 foundry, 1.75 to 2.25 per cent sillicon, f. o. b. furnaces, \$27.00; No. 1 foundry, 2.25 to 2.75 per cent sillicon, \$27.50; iron of 2.75 to 3.25 per cent sillicon, \$28.00; iron of 3.25 to 3.75 per cent sillicon, \$28.50; iron of 3.75 to 4.25 per cent sillicon, \$29.00; charcoal iron, f. o. b., furnaces, \$34.00 to \$35.00.

OLD MATERIAL

Old steel axles.....	\$27.00 to	\$28.00
Old iron axles.....	30.00 to	31.00
Old steel rails.....	18.00 to	19.00
Heavy melting steel.....	17.00 to	18.00
No. 1 R wrought.....	20.00 to	21.00
No. 1 cast.....	24.00 to	25.00
Stove plate.....	18.00 to	20.00
Old car wheels.....	21.00 to	22.00
Old tramcar wheels.....	24.00 to	25.00
Machine shop turnings.....	11.00 to	12.00
Cast iron borings.....	12.00 to	12.50
Cast iron borings (Chem.).....	16.50 to	17.00

RAILROADS

BIG TERMINAL YARD AT CLIFTON FORGE.

Large Growth of Traffic Compels Enlargement—
Contracts Let and Work Under Way.

The Chesapeake & Ohio Railway is building additions to its terminal yards at Clifton Forge, Va., which is the terminus of the Alleghany, James River and Mountain districts of the Chesapeake & Ohio System.

The present existing yard facilities there, having a total capacity of 1640 cars, are totally inadequate to accommodate or promptly receive, classify and dispatch the traffic now going over the lines, which for a 30 days period has amounted to an average of 99 trains—1746 cars including 1000 loads—per day. During the periods of maximum traffic it has been possible to handle the freight movement through the terminal only by requiring yards east and west of Clifton Forge to perform switching which properly devolved upon that terminal, thereby incurring serious delays, complications and excessive costs. To overcome this situation and to properly provide for present and prospective traffic, to relieve yards east and west of Clifton Forge of the extra switching which they have thus done, to expedite the movement of traffic, and to provide facilities for the general classification of east-bound traffic, it is proposed to construct a modern terminal with ample capacity to handle the present business and to allow for some future growth. The improvements consist of a receiving yard of ten 100 car tracks, double track hump, with scales in each track, and twenty classification tracks of sufficient length to hold 100 car trains.

Owing to the topography of the country, it is stated, it is necessary in preparation for making the proposed improvements, to move a large portion of the city of Clifton Forge and also a suburb known at Selma, this work involving the moving of about 80 houses and the relocation of a highway. It is also necessary to change the course of Jackson River at two points and to cross that stream with the entire yard layout.

All of this construction work involves the handling of approximately 2,000,000 cubic yards of excavation, 25,000 cubic yards of concrete, 1,300,000 feet board measure of timber in coffer dam, 275,000 pounds of reinforcing steel and 7,200,000 pounds of bridge steel.

After bids were received contracts were awarded to the Brooks-Callaway Co. and the Hardaway Co., both of Atlanta, Ga.

The work is being handled by C. W. Johns, chief engineer of the Chesapeake & Ohio Railway, Richmond, Va.

Railroad, Land and Lumber Development.

D. F. Dunkle, according to a report from West Palm Beach, Fla., has announced a plan for building a logging railroad 15 miles along from there to certain timber lands in the interior of Palm Beach County, the idea being that this line will ultimately become part of a railroad which will cross the state to the Gulf coast. In this connection it is stated that negotiations have been under way for some time with the Drake Lumber Co. to locate a large sawmill at West Palm Beach. The Chamber of Commerce has approved the railroad plan.

It is further announced there that a stock company, to be called the West Palm Beach Industries, Inc., will be organized with \$100,000 capital stock at \$100 par value per share. Of this \$30,000 will be used to buy land along the route of the railroad besides lots and other real estate at West Palm Beach, these purchases to include a tract of land immediately west of the city where the sawmill will be situated. The rest of the funds are to be used for railroad construction, etc.

Record Breaking Freight Traffic Continues.

The record breaking freight movement for this season of the year continues on the railroads, exceeding former years by wide margins. Loadings of revenue freight during the week ended March 10 totaled 905,219 cars and while this was about 12,600 cars less than the preceding week, it was 84,300 cars more than were loaded in the corresponding week of last year and over 204,000 cars more than were loaded during the same week in 1921. The records of corresponding weeks in 1918, 1919 and 1920 were also exceeded greatly. The reduction as compared with the preceding week this year was, it is stated, by the car service division of the American Railway Association, due to unfavorable weather conditions.

In relation to the heavy traffic movement the Bureau of Railway Economics says that freight movement in January was the heaviest ever known, traffic for that period totaling over 37,668,000,000 net ton miles. Notwithstanding railroad operations are usually handicapped in January on account of bad weather, the movement of freight this year was greater than in any month during 1921, while it was exceeded only in two months of 1922, both of them in the fall when freight traffic is at its heaviest. January showed an increase, as compared with January, 1922 of over 10,517,000,000 net ton miles or 38.7 per cent. These figures represent the number of tons of freight handled when multiplied by the distance carried. In the Southern district, considered separately, the increase as compared with January of last year was 46.4 per cent.

During the two months, January and February this year, there were 25,866 new freight cars and 589 new locomotives put in service on the railroads, while orders were placed during the same period for 102,912 cars and 1945 new locomotives.

Kansas City Southern to Spend Over \$1,100,000 for Improvements.

L. F. Loree, chairman of the board of directors of the Kansas City Southern Railway, is quoted in a report from New York as saying that a total of \$1,100,000 will be expended for buildings at Pittsburgh, Kan., and Port Arthur, Tex., and that a further extension of line amounting to six miles will be made into the zinc fields of Oklahoma, making a total of ten miles built there. The building construction at Pittsburgh consists of enlargement of the shops at a cost of \$600,000 and that at Port Arthur is enlargement of the grain elevator there, at a cost of \$500,000. The elevator now holds 465,000 bushels but when it is completed it will hold 1,065,000 bushels and two vessels can be loaded at the same time instead of one.

Mr. Loree is further reported as saying that he found the attitude of people in the Middle West and the Southwest much more favorable to the railroads than it is generally supposed to be and that the prospect is for a good year both as to railroad operations and business.

It is interesting also to note that the Port Arthur Canal & Dock Co., a subsidiary of the railway company, has applied to the Interstate Commerce Commission for authority to issue \$2,000,000 of bonds, the proceeds to be used partly for additions and betterments and partly for meeting maturing indebtedness, the latter amounting to \$1,000,000.

Large Financing for Equipment.

The Pennsylvania Railroad Co. has sold \$31,500,000 of 5 per cent equipment trust certificates to Kuhn, Loeb & Co., of New York, the securities maturing from March 1, 1924 to March 1, 1938 inclusive, and the transaction being subject to approval by the Interstate Commerce Commission. The proceeds of this issue are to pay for equipment recently ordered to the extent, it is stated, of \$39,375,000, of which 20 per cent is being paid for in cash. The Fidelity Trust Co., of Philadelphia, is trustee for the loan.

Southern Railway's New Cars and Engines Nearly All Built in South—Other Equipment News.

Particulars concerning the big equipment order of the Southern Railway made public by the company show that nearly all of the \$17,000,000 of cars and engines will be built at points on the Southern Railway System. All of the 50 Mikado type freight locomotives and 16 Pacific type passenger locomotives will be built at Richmond, Va., by the American Locomotive Co.; 1500 box cars and 1365 coal cars at Memphis and St. Louis by the American Car & Foundry Co.; 2000 coal cars at Lenoir City, Tenn., by the Lenoir Car Works; 570 box cars at Mount Vernon, Ill., by the Mount Vernon Car & Manufacturing Co.; and 200 stock cars at Anniston, Ala., by the Kilby Car & Foundry Co., while 1500 coal cars will be built at Baltimore, Md., and Middletown, Pa., by the Standard Steel Car Co., and the 5 dining cars at Chicago by the Pullman Company. The box cars will be of 40 tons capacity and the coal cars of 50 tons, the former being like the 6000 new box cars recently placed in service on the system.

The Louisville & Nashville Railroad has awarded contracts for part of its recently announced \$20,000,000 equipment plan, the orders for 30 freight locomotives and 6 passenger locomotives going to the American Locomotive Co., for 6000 coal cars to the Pressed Steel Car Co., and 1000 box cars each to the Mount Vernon Car & Manufacturing Co., and the Tennessee Coal, Iron and Railroad Co., car building plant, the latter at Birmingham, Ala.

Missouri Pacific Railway is reported in the market for 10 baggage cars and 5 mail storage cars.

Plans for Railroad Across the "Staked Plains."

Plans for the construction of a railroad—the Texas, Panhandle & Gulf—from Seymour, Tex., to Tucumcari, N. M., about 300 miles, have been under consideration for three years but a recent report from Fort Worth, Tex., quotes the Star-Telegram of that city as saying Col. C. H. Powell, of Chicago, who is promoting the plans, stated in an interview that the route has been selected, mapped and surveyed by Wallace & Noonan, consulting engineers, of Chicago and New York, and that E. J. Noonan, junior member of the firm has gone over the route, gathering data as to resources and possibilities of the regions to be traversed by the railroad, which would cross the Staked Plains section of Texas and New Mexico. The route outlined from Seymour is via Truscott, Paducah, Turkey, Quitague, Tulia, Nazareth, and Dimmitt, Tex., and Fiona, Parmerton and other points in New Mexico. Connection from Seymour to Fort Worth is contemplated via the Gulf, Texas & Western Railroad, the Weatherford, Mineral Wells & Northwestern Railway and the Texas & Pacific Railway, or else over the Rock Island Lines.

The estimated cost of construction is \$11,000,000, of which about \$6,000,000 would represent the first outlay. The idea is to raise one-half of this in Fort Worth and other places along the route. It is claimed that the line would be profitable as an independent enterprise and that it would fill an important need in the western part of Texas. Col. Powell has recently been in Fort Worth in relation to the plan.

Bill Passed to Carry Out Frisco Merger.

The Texas Legislature has finally passed the bill to authorize the merger with the St. Louis-San Francisco Railway of the International & Great Northern Railroad, and several smaller lines, viz. the Fort Worth & Rio Grande, the Brownwood North & South, the Quanah, Acme & Pacific, and the Paris & Great Northern, with an aggregate of over 1400 miles of line, the bulk of which is in the International & Great Northern System—1160 miles. This will enable the St. Louis-San Francisco Railway Co. to carry out its consolidation plan previously announced.

GOOD ROADS AND STREETS

GEORGIA'S ROAD BUILDING PROGRAM TOTALS \$3,346,317.

Will Build Roads in 53 Counties—Provision Made for Three Bridges.

Atlanta, Ga.—As indicated by the program outlined by the State Highway Department for the construction of roads and bridges in Georgia during the coming year, a total of 400 miles of road and 3 bridges will be built at a cost of \$3,346,317, half of the cost to be borne by the federal government. Federal aid money, which will be matched with an equal amount by the counties, is being allotted as follows:

Floyd County, Rome-Cartersville road, \$30,000; Fannin County, Blue Ridge-Tennessee State line road, \$20,000; Haralson County, Buchanan-Carrollton road, \$32,000; Cherokee County, Canton-Jasper road, \$10,000; Haralson County, Tallapoosa-Alabama State line road, \$48,613; Rabun County, Lincoln-Tallulah River road, \$20,000; Hall County, Gainesville-Jefferson road, \$26,000; Franklin County, Carnesville-Commerce road, \$15,000; Stevens County, Cornelia-Toccoa road, \$20,000; Habersham County, Demorest-Clarksville road, \$15,000; White County, Cleveland-Blairsville road, \$18,293; Fayette County, Fayetteville-Sharpsburg road, \$21,000; Carroll County, Carrollton-Bremen road, \$50,000.

Meriwether County, Harris City-Warm Springs road, \$25,000; Troupe County, LaGrange-West Point road, \$50,000; Butts County, Jackson-Griffin road, \$35,000; Oconee County, Watkinsville-Madison road, \$9,200; Elbert County, Elberton-Washington road, \$20,000; Jasper County, Monticello-Gray road, \$15,000; Hart County, Royston-Hartwell road, \$6,500; Newton County, Covington-Monticello road, \$17,500; Green County, Greensboro-Watkinsville road, \$19,000; Madison County, Danielsville-Comer road, \$18,000; Jefferson County, Wrens-Richmond County line road, \$20,000; Hancock County, Sparta-Washington County line road, \$20,000; Richmond County, from point 17 miles south of Augusta to Jefferson County line, \$40,000.

Taliaferro County, Crawfordville-Warren County line road, \$15,000; Wilkes County, Tignall-Elberton road, \$20,000; Baldwin County, Milledgeville-Sandersville road, \$15,000; Columbia County, Appling-Lincoln County line road, \$25,000; Terrell County, Dawson-Parrott road, \$29,000; Randolph County, Cuthbert-Dawson road, \$29,000; Sumter County, Americus-Ellaville road, \$27,802; Wheeler County, Glenwood-Lumber City road, \$12,500; Telfair County, McRae-Milan road, \$15,000; Dodge County, Rhine-Milan road, \$13,750; Twiggs County, Macon-Jeffersonville road, \$10,000; Dooley County, Pinehurst-Unadilla road, \$13,500; Bibb County, Macon-Jeffersonville road, and other purposes, \$85,000; Bulloch County, Statesboro-Savannah road, \$55,000.

Toombs County, Vidalia-Lyons road, \$20,000; Tattnall County, Reidsville-Collins road, \$17,000; Jenkins County, Millen-Screven County line road, \$20,000; Bryan County-Bulloch County, to Jenks Bridge, \$20,000; Dougherty County, Albany-Miller road and other projects, \$100,000; Colquitt County, Moultrie-Camilla road, \$15,000; Echols County, Valdosta and Florida State line road, \$8,500; Lowndes County, Valdosta-Cooke County line road, \$70,000; Brooks County, Quitman-Thomas County line road, \$96,000; Ware County, Waycross-Ruskin road, and Waycross-Atkinson County line road, \$80,000; Pearce County, Ofterman-Patterson road, \$10,000.

In addition to the roads, \$60,000 has been allotted to Cobb-Fulton Counties for the Chattahoochee River bridges on Roswell road, \$45,000 to Thomas County for bridge between Thomasville and Carlo, and \$45,000 to Pearce and Ware Counties for bridge over Satilla River.

Virginia Awards Contracts at Over \$1,000,000 for 31 Miles of Roads—Low Bids for 13 Miles at \$309,845—Bridge Bids Total \$32,475.

Richmond, Va.—Contracts have been awarded by the State Highway Commission for the construction of 31.5 miles of roads at a total cost of \$1,027,249, and bids have been opened for the construction of 13 miles additional, the low bids aggregating \$309,845. Bids have also been opened for the construction of three bridges, low bids totaling \$32,475.

For the construction of 4.3 miles of road from Toano to Drascind Creek, contract was awarded to H. H. George, Jr. & Son of Richmond, at \$177,657, and for 9.4 miles between Carrsville and Suffolk, to the Royer-Ferguson Company of High Point, N. C., at \$343,274. Burgess & Atkinson of Scottsville, Va., received the contract at \$70,578 to build 6.5 miles of top soil road from Columbia to Fife, and W. P. Midkiff of Ivanhoe, Va., at \$218,610, to build 5.8 miles of surface treated macadam from Claypoole Hill to Rosedale. The Starkweather Construction Corp., Crozet, Va., received contract at \$21,130 to build 5.5 miles of bituminous macadam between Grundy and Hanger.

Low bid was submitted at \$30,052 by C. H. Oliver of Doswell, Va., to build 6.6 miles of top soil road from Cooper's Store to Fork Union, and Perkins & Barnes of Blackstone, Va., submitted low bid at \$14,138 to build a soil road from Cunningham Creek to Cooper's Store. Scott & Trinke of Norton, Va., submitted low bid at \$265,655 to build 4.9 miles of bituminous macadam between the Dickenson County line and Dooley.

The Roanoke Iron & Bridge Works of Roanoke submitted low bid at \$11,248 to construct a 122-foot bridge, 19 feet wide, over Grassy Creek near Soudan. It will be of reinforced concrete and structural iron. For the construction of a reinforced concrete bridge, 38 feet long and 22 feet wide, over Kingsdale Swamp, R. Stuart Royer of Greensboro, N. C., submitted low bid; on reinforced concrete bridge, 19 feet wide, over Bird Creek, Burgess & Atkinson of Scottsville, Va., were low bidders at \$15,128.

Bids Wanted on 19 Miles of Roads and Street.

Bids have been invited until April 3, by the Maryland State Roads Commission, at its office in Baltimore, for the construction of 19.54 miles of roads in 5 counties and a section of street in Baltimore. These include 4.96 miles of concrete in Garrett County, between Friendsville and Kaese's Mill; .78 mile of asphalt on Mount Street between Harlem avenue and Riggs avenue, Baltimore, and 2 miles of concrete in Frederick County, along the Urbana Pike, between Urbana and the Montgomery County line.

In Baltimore County, there will be 4.5 miles of concrete along the Philadelphia road, between Whitmarsh and the Harford County line; in Caroline County, 4.5 miles of concrete between Goldsboro and Marydel, and in Wicomico County, 2.8 miles of concrete, between Salisbury and Delmar.

John N. Mackall, is the chairman of the State Roads Commission and L. H. Steuart, secretary.

Low Bid of \$373,000 on 23 Miles of Road with Bridges.

Montgomery, Ala.—Low bids aggregating \$373,667 have been received by the State Highway Commission for the construction of 23.6 miles of federal aid roads in Pickens County, with the necessary bridges. W. W. Thompson submitted the low bid for the roadway and Ed. Pettus for the bridges.

The road contemplated extends from Carrollton in Pickens County to the Tuscaloosa County line.

North Carolina Authorizes 375 Miles of Roads. Construction Involves 41 Projects in 35 Counties—Highway Commission May Build Cement Mill.

Raleigh, N. C.—At a recent meeting of the State Highway Commission, 41 additional road projects were authorized the construction to involve over 375 miles in 35 counties. Among these are the following: Hertford County, 14 miles, including a bridge over Meherrin River; Duplin County, 10 miles; Craven County, 9.9 miles; Wilson County, 11.4 miles; New Hanover County, 8 miles; Brunswick County, 8.2 miles and Columbus County, 11.2 miles.

In Pender County, 5.6 miles will be constructed; Onslow County, 18.5 miles; Lee County, 6.5 miles; Wake County, 2.5 miles; Guilford County, 4 miles; Davidson County, 15.3 miles; Alamance County, 4 miles; Moore County, 16 miles; Montgomery County, 10.11 miles; Rockingham County, 8.2 miles; Mecklenburg County, 10.4 miles; Union County, 15 miles; Anson County, 7 miles; Richmond County, 4 miles; Surry County, 8 miles; Caldwell County, 29.4 miles and in Stokes County, 17 miles.

A total of 10 miles was authorized in Yadkin County, and in Davie County, 7 miles; Forsyth County, 5 miles; Wilkes County, 15 miles; Henderson County, 9 miles; Cleveland County, 9.5 miles; Polk County, 14 miles; Rutherford County, 23.2 miles; Yancey County, 20 miles and Madison County, 9 miles.

In anticipation of a cement shortage, the Commission appointed a committee to investigate the feasibility of constructing and operating a cement mill at some point in the State. A committee was also appointed to draw up regulations with reference to signs, telephone poles, power line crossings, etc., in accordance with powers granted by recent legislation. Editorial

Montgomery County Wants Bids on Road and Bridges.

Troy, N. C.—The construction of 8.8 miles of top soil road and two bridges is planned by the Montgomery County Road Trustees, who will receive bids at their office in this city until April 6. The road will extend from Ether to Saunders and the two bridges 12 by 70 feet, which will be of steel on reinforced concrete abutments, will be built across the east and west prongs of Little River.

Specifications and bidding blanks may be obtained from L. V. Edwards the consulting engineer at Winston-Salem, or from L. A. Cooper, resident engineer at Troy. W. B. Hicks of Biscoe, N. C., is chairman of the Montgomery County Road Trustees.

Madison County Invites Road Proposals.

Madison, Fla.—The Board of County Commissioners of Madison County will receive sealed proposals until April 1 for constructing a sand-clay road bed on road projects Nos. 1, 3-11, 4 and 6, the mileage to be improved totaling more than 60. On project No. 1, 28.25 miles will be improved, while 12.94 miles will be improved on project No. 3-11, a total of 13.43 on project No. 4, and 5.95 miles on project No. 6.

Plans and specifications may be obtained or examined at the office of Charles S. Wadsworth, county engineer, Madison. L. A. Fraleigh is the chairman of the Board of County Commissioners, and D. F. Burnett, Jr., is the county clerk.

Will Ask Bids on 28 Miles of Road.

Gadsden, Ala.—Information has been received in Gadsden that the State Highway Commission will soon call for bids to build 28 miles of the Birmingham-Gadsden highway through St. Clair County. The federal government has approved the project which will cost about \$400,000.

Mississippi Wants Bids on 30 Miles of Roads.

Jackson, Miss.—Construction will probably soon begin on 4 sections of roads in Mississippi, located in as many counties, bids having been invited by the State Highway Department, with offices in this city. The construction includes 1.8 miles of concrete or equivalent in Harrison County, for which bids will be opened on April 3; 7.7 miles of graveled surface road in Pearl River County, bids to be opened April 4; 12.1 miles of graded road in Leake County, bids to be opened April 6, and for 5.8 miles of gravel surfaced road in Holmes County, bids to be opened April 10.

H. C. Deetzer, is the State Highway Engineer, with offices in Jackson.

St. John's County to Vote on \$500,000 Bonds.

St. Augustine, Fla.—An election has been called by the board of county commissioners of St. John's County for April 24 on \$500,000 of bonds to construct several sections of hard surfaced roads in the county. The roads to be improved include the Elkton-Tocoi road, 8.4 miles; road from Tocoi to New Augustine, 14 miles; Spud road of 3 miles; road from Hastings to Putnam County line, 6.25 miles; Hastings boulevard extension to Flagler County line, 2.5 miles; road from Durbin through Sampson, as well as others.

These roads will lead to many sections of the county and will open up much valuable land for farming.

Bids Wanted on Navarro County Road.

Corsicana, Tex.—Sealed proposals addressed to A. P. Mays, County Judge, Corsicana, will be received until April 5, for the improvement of a section of highway No. 31, in Navarro County. It is estimated that the work will involve 34,066 square yards of concrete pavement, 1996 lineal feet of guard fence, 76,075 pounds of reinforcing steel, 11,356 board feet of form lumber left in place, besides shouldering and shaping subgrade, etc.

Detailed plans and specifications may be seen and information obtained at the office of McClendon & Purnell, county engineers, Corsicana.

Three Road Contracts Total Over \$218,000.

Birmingham, Ala.—Contracts for paving the Roebuck-Chalkville road have been awarded by the board of revenue to three companies, the total cost of the work to be \$218,490. The Southern Roads Company of this city was awarded contract to pave the first five miles at a cost of \$101,230. The next section of five miles will be built by the Emulsified Asphalt Company at a cost of \$62,540. The third section of four and one-half miles, which will extend to the St. Clair County line, will be constructed by Sam E. Finley of Atlanta, at \$54,720.

North Carolina Invites Bids on 179 Miles of Roads to Cost \$4,000,000.

Raleigh, N. C.—Bids will be received until April 3 by the State Highway Commission for the construction of 179 miles of highway, representing every section of the state. The cost is estimated at \$4,000,000, and the construction will cover 23 road projects and 3 bridges. The roads contemplated aggregate 111.24 miles of hard surfaced road, 18.87 miles of penetration macadam, and 48.91 miles of gravel.

Nueces County Awards Two Contracts at \$240,000.

Corpus Christi, Tex.—Contracts have been awarded by the Commissioners Court of Nueces County to Smith Brothers of Dallas, for the construction of 2 sections of roads at an aggregate cost of \$240,067. The bid submitted for hard surfacing one section near Corpus Christi called for an expenditure of \$112,922, and for a section near Bishop \$127,145.

LUMBER AND BUILDING MATERIALS

Lumber Shipments Show Decline But Are Still Large.

Washington, March 23.—The feature of the week ending March 17 in the national lumber industry was the decline in shipments of lumber from the mills. The preceding week had witnessed shipments at unusual heights for this season of the year, being 278,000,000 feet. Last week they fell to 256,000,000 feet, which is still an exceptional volume. New business received was practically the same as the week before and there was an apparent slight decline in production, as reported by 394 mills as against 418 of the revised figures for the week before.

Shipments for all the reporting mills from nine regional associations show shipments to be 106 per cent and orders 101 per cent of current production. Southern pine mills reported their shipments falling 5 per cent below production and new business 10 per cent below production. West Coast mills reported shipments 14 per cent and orders 7 per cent above output. Of the reporting mills 362, having an established normal production figure for the week, report actual production 1 per cent, shipments 7 per cent and new business 3 per cent above normal production.

A gratifying feature of the lumber movement so far this year is that while accumulated orders exceed production by about 640,000,000 feet, notwithstanding the great increase in production, shipments are less than 100,000,000 feet under orders. This condition reflects improvement in transportation facilities and results of the campaign in the building trades to store material in anticipation of needs as much as possible, in order to avoid transportation congestion in the peak months of the fall.

The following table presents in comparative form the statistics of the lumber movement for the past week, the corresponding week of 1922 and the preceding week of 1923:

	Past Week 394	Corresponding Week 1922 382	Preceding Week 1923 (Revised) 418
Mills			
Production	240,274,365	180,944,123	245,072,935
Shipments	255,754,585	193,311,165	277,815,090
Orders	243,167,784	203,325,892	244,005,311

For the year so far, as compared with the corresponding period of 1922 the figures are as follows:

	1923	1922	1923
1923	2,296,012,773	2,756,201,268	2,948,394,865
1922	1,938,079,627	1,876,877,892	1,955,323,801
1923 Increase	357,933,146	889,323,376	993,071,064

LUMBER MOVEMENT FOR ELEVEN WEEKS, AND FOR THE WEEK ENDING MARCH 17.

	Production		Shipments		Orders	
	1923	1922	1923	1922	1923	1922
Southern Pine Association:						
Total	847,734,591	798,661,922	932,025,077	713,689,365	1,023,030,838	745,971,515
Week (137 mills)	85,190,393	72,611,951	80,622,263	75,660,765	76,165,756	77,518,650
West Coast Lumbermen's Ass'n.:						
Total	986,349,792	846,077,491	1,178,317,033	768,369,856	1,193,182,323	749,970,527
Week (141 mills)	107,566,406	81,960,571	122,936,572	75,892,921	115,128,852	89,247,132
Western Pine Mfrs. Ass'n.:						
Total	155,609,000	98,548,000	271,842,000	195,568,000	268,725,000	205,150,000
Week (40 mills)	21,837,000	11,140,000	26,259,000	21,605,000	25,575,000	20,125,000
Calif. White & Sugar Pine Mfrs.:						
Total	31,258,000	22,491,000	68,279,000	40,778,000	137,247,000	80,479,000
Week (6 mills)	1,934,000	no cut	2,720,000	3,872,000	955,000	4,131,000
Calif. Redwood Ass'n.:						
Total	83,601,000	66,558,000	96,934,000	65,435,000	124,039,000	74,829,000
Week (15 mills)	9,784,000	6,898,000	8,362,000	6,652,000	10,869,000	5,279,000
North Carolina Pine Ass'n.:						
Total	88,119,190	88,385,214	95,434,258	72,895,671	95,842,701	78,602,759
Week (29 mills)	4,544,666	7,641,601	4,424,350	7,558,479	5,038,176	5,331,110
Northern Hem. & H'wood (Sftw'd):						
Total	24,563,000	17,358,000	24,681,000	20,142,000	25,917,000	20,321,000
Week (9 mills)	1,458,000	692,000	1,201,000	2,070,000	1,120,000	1,694,000
Northern Pine Mfrs. Ass'n.:						
Total	78,778,200	.....	88,688,900	.....	80,411,000	.....
Week (9 mills)	7,015,900	.....	8,092,400	.....	7,432,000	.....
General Total for 11 Wks. (Sftwd.)	2,296,012,773	1,938,079,627	2,756,201,268	1,876,877,892	2,948,394,865	1,955,323,801
Northern Hem. & H'wood (H'dwood)						
11 Weeks	38,234,000	.....	32,219,000	.....	31,534,000	.....
General Total for Week	240,274,365	180,944,123	255,754,585	193,311,165	243,167,784	203,325,892

CHICAGO CAPITAL IN BIG FLORIDA LUMBER DEVELOPMENT.

1,000,000 Acres of Long Leaf Yellow Pine to Be Fully Utilized, First for Turpentine, Then for Timber Products.

A large interest in the Consolidated Naval Stores Company, turpentine and rosin factors of Jacksonville, Fla., has been purchased by Baker, Fentress & Company of Chicago who announce that a comprehensive plan will be worked out for the full utilization of over 1,000,000 acres of long leaf yellow pine timber lands.

The announcement is significant because of the magnitude of the contemplated operations, and it is noteworthy also because it offers another illustration of the confidence of northern capital and energy in Southern resources.

Detailing its plans for development, the company says:

"We think we see a tremendous future for investments in Florida resources. The Consolidated Naval Stores Company jointly with the Gillican-Chipley Company controls the greatest stand of long leaf yellow pine on the continent. Under the old system of turpentine farming this timber would be leased to small operators. This method involves heavy waste of a fast diminishing naval stores supply, and runs counter to the public interest in many ways.

"To insure the utmost realization from this property, this vast holding of long leaf pine will be turpented under the supervision of the Gillican-Chipley Company of New Orleans. The timber will be handled with regard for the maximum production of rosin, turpentine, lumber and by-products with a definite intention to conserve the resources and augment the wealth of the state.

"After the extraction of the turpentine and rosin timber will be manufactured into lumber, covering a period of probably fifteen years. This conversion of the timber will come under the supervision of Baker, Fentress & Company."

Twenty years ago, says the company's statement, northern lumber operators disparaged Florida timber, except for turpentine, on the ground that the stand was too thin to yield satisfactory results in lumber operations. This view is now definitely refuted by development plans of the company which are based on many years' experience in financing lumber operations in the great timber areas of the company. The statement of Mr. Fentress says further:

"In the past Florida has imported wood for boxes, crates and barrels, as well as lumber for buildings, bridges and

railway construction. We know that with proper administration the timber controlled by the Consolidated Naval Stores Company and Gillican-Chipley interests will supply the needs of the state for years and add greatly to the industrial wealth of the people."

Handbook of Forest Trees.

A pocket manual entitled "Common Forest Trees of North Carolina," which has been prepared by J. S. Holmes, state forester, has been issued by the North Carolina Geological and Economic Survey, Chapel Hill, N. C., in co-operation with the United States Department of Agriculture. This little book tells all about the trees of the state and how to know them. Each variety of tree is considered separately, the description being accompanied by illustrations showing leaves, twigs, seed, etc., so that recognition of any species is facilitated. The text was prepared by the state forester in collaboration with the state foresters of Tennessee, Virginia and Maryland, each of whom, it is noted, is adapting it to use in his own state and publishing it simultaneously. Botanical or scientific names of trees are included to avoid confusion likely to arise by the use of common names alone, as these often vary in different states and even in different counties of the same state. These facts together with others are stated in the foreword, which was written by Dr. Joseph Hyde Pratt, Director of the Survey. Copies are being sent to state, county and school officials to bring it to the attention of teachers, and arrangements have been made to supply copies for classes or others through the North Carolina Forestry Association—also at Chapel Hill—at 10 cents a copy when five or more copies are ordered.

Report on Southern Pine.

The Southern Pine Association for the week ended March 16 reports as follows on 137 mills:

	Cars.	Feet.
Orders on hand beginning of week.....	21,358	455,416,634
Orders received during week.....	3,572	76,165,756
Total	24,930	531,582,390
Shipments during week.....	3,781	80,622,263
Orders on hand end of week.....	21,149	450,960,127

Production for the week was 85,190,393 feet. Shipments were 4,568,130 feet below production or 5.36 per cent, and orders were 9,024,637 feet below production or 10.59 per cent. Orders were 5.53 per cent or 4,456,507 feet below shipments. The week was 3.67 per cent or 3,245,123 feet below normal production, and orders were 13.87 per cent or 12,269,760 feet below normal production. The decrease in "orders on hand" amounted to 4,456,507 feet or .98 per cent.

North Carolina Pine for the Week.

The North Carolina Pine Association reports as follows on 48 mills for the week ending March 17:

	Total Feet
Orders	9,193,176
Shipments	9,463,425
Production	9,045,111
Normal Production	10,226,000

The orders were 3 per cent below shipments, 2 per cent above actual production and 10 per cent below normal production. Shipments were 4 per cent above normal production and 8 per cent below normal production. The actual production was 11 per cent below normal. The week shows a decrease in orders of 694,205 feet or 7 per cent.

Col. A. C. Goodyear, president of the Great Southern Lumber Company of Bogalusa, La., has been made vice president of the American Forestry Association, a national organization which is doing valuable reforestation work in every section of the United States. Col. Goodyear has made a thorough study of reforestation and much of the work which is being carried out by the Great Southern Lumber Company is due to his suggestions.

Hardwood Producers to Meet at Chicago.

The Hardwood Manufacturers Institute will hold its first annual convention in Chicago on May 10 and 11 at the Blackstone Hotel. The program is designed to celebrate the progress the Institute has made since its organization in June of last year with some 70 members. The meeting in May will show an organization with over 300 hardwood producers as members and representing upwards of a third of the hardwood lumber manufactured in the country.

Contract Let for \$1,000,000 Slattery Building.

General contract has been awarded to the Central Contracting Company of Shreveport, La., at \$1,019,000 for the erection of the J. B. Slattery building shown in the accompanying illustration. Plans and specifications for the structure were prepared by Mann & Stern of Little Rock.

The building will be 80 by 150 feet, 16½ stories with basement, fireproof construction of steel, reinforced concrete



\$1,000,000 SLATTERY BUILDING TO BE ERECTED AT SHREVEPORT, LA.

and brick, faced with terra-cotta, and having a granite base. It will be covered with a Barrett tar and gravel roof and equipped with a steam heating and ventilating system and four high speed passenger elevators and one freight elevator.

Baltimore Lets \$1,070,000 Contract for Filter Beds.

Contract has been awarded to the Carozza-Rowe Construction Company, local contractors, at \$1,070,000, for the construction of the filter beds at the Montebello plant of Baltimore's water supply. The present capacity is 128,000,000 gallons per day, but when the new filters are completed the capacity will be increased to 224,000,000 gallons daily. This is said to be sufficient to purify the maximum flow from Loch Raven.

TEXTILE

Pacific Mills Will Expend Several Millions at Groce—Plans Outlined for Big Development.

Spartanburg, S. C.—Outlining in some detail, the plans of the Pacific Mills of Boston for the establishment of its proposed bleachery and finishing plant at Groce, reference to which has previously been made in the MANUFACTURERS' RECORD, Edwin F. Greene, president of Lockwood, Greene & Company, at a dinner in this city in honor of the Pacific Mills delegation, after an inspection of the mill site, observed that the enterprise was primarily for the benefit of the community as well as for the owners of the plant.

Mr. Greene stated that the project at Groce means a Southern development of the finishing branch of the company's industrial activities. At present one bleachery unit will be built on the site at Groce which will do only simple bleaching. It is expected that dyeing and printing will be undertaken with the ultimate development of the property. A cotton mill for the production of wide sheetings, which will be finished for use as sheets and pillow cases, will also be built, 30,000 spindles to be installed. Gray cloth produced in the South will be finished at the Groce plant, rather than shipped North, thus saving time, freight charges and other expenses.

Engineering and construction details will be handled by Lockwood, Greene & Company, with offices at Atlanta and Charlotte.

Marshville Manufacturing Company's Mill for Tire Cord Fabric.

Marshville, N. C.—The proposed mill of the Marshville Manufacturing Company, reference to which was made in the MANUFACTURERS' RECORD last week, will be equipped for the daily production of 6000 pounds of tire cord fabric, according to additional information which is now available. Capitalized at \$100,000, the company will erect a building 120 by 130 feet, and will install \$48,000 worth of machinery, contract for which has been awarded the Saco-Lowell Machine Company of Boston, through Rogers W. Davis of Charlotte, its Southern representative.

Contract for the construction of the building has not yet been awarded, but its equipment will include 2800 twister spindles, and 4 looms, the yarns to be purchased. The machinery will be electrically driven and 200 horse power will be available.

Officers of the Marshville Manufacturing Company are S. M. Robinson, president; H. B. Marsh, vice-president, and A. M. Stack, 3rd, secretary, treasurer and manager.

Brown Manufacturing Company's Improvements.

Concord, N. C.—Further information has been obtained relative to the addition which the Brown Manufacturing Company will erect to its mill here for a dye plant, and to which the MANUFACTURERS' RECORD made reference last week. Contract has been awarded to the Brown-Harry Company of Gastonia for the erection of the new addition which will be of reinforced concrete, 2 stories, 75 by 75.6 feet, and will cost \$25,000.

R. C. Biberstein of Charlotte is the engineer in charge.

Will Form \$400,000 Company to Build Mill.

Mexia, Tex.—J. K. Hughes of Mexia and associates have subscribed \$400,000 stock in a company that will be immediately incorporated to build a textile mill here. It is stated that a 5000-spindle cotton mill will be constructed. The stock in the proposed company was taken largely by local oil men.

Dallas Textile Mills' \$1,000,000 Plant.

Dallas, Tex.—Plans for the construction of the \$1,000,000 cotton mill, which will be erected here by the Dallas Textile Mills Company, are being worked out and bids will be opened about May 1. It is estimated that the cost of the buildings will reach \$250,000, while the mill machinery will cost \$500,000, and the power plant, \$75,000.

A total of 12,000 spindles will be installed, the machinery to be electrically driven, with 800 horse power available. The power plant will be of the internal combustion type. Robert & Company, Inc., of Atlanta, are the engineers.

Officers of the company are J. Perry Burrows, president; Louis Lipsitz, vice-president, and George N. Aldredge, secretary. The product of the mill will be cotton piece goods.

Alma Mills' Improvements to Cost \$450,000.

Gaffney, S. C.—Further information has been secured relative to the proposed additions to the plant of the Alma Mills here, mention of which was made in the MANUFACTURERS' RECORD last week. The enlargements will cost about \$450,000, of which \$150,000 will be expended for the erection of a brick and wood building, 105 by 228 feet, and \$300,000 for the machinery, consisting of 15,000 spindles and 400 looms. The mill will be electrically driven, employing 300 hands, for the production of shade cloth. J. E. Sirrine & Company of Greenville are the engineers.

Officers of the Alma Mills, which are capitalized at \$600,000, are W. C. Hamrick, president and treasurer, and W. C. Hamrick, Jr., secretary and assistant treasurer.

Engineers Engaged for \$500,000 Arcadia Plant.

Spartanburg, S. C.—Lockwood, Greene & Co., of Boston and Atlanta, and F. H. and J. C. Cunningham of Greenville, S. C., have been engaged as engineers to design and build the new \$500,000 mill which will be erected here by the Arcadia Mills Company, and to which reference was made in the MANUFACTURERS' RECORD two weeks ago. It is stated that 20,000 spindles and 400 looms will be installed at present.

Contract has been awarded to Bryson & Weber to erect 50 to 75 dwellings.

Officers of the Arcadia Mills, include Dr. H. A. Ligon, Sr., president, and H. A. Ligon, Jr., vice-president and general manager.

Contract Awarded for Magnolia Silk Mills.

Chattanooga, Tenn.—Contract for the construction of the new plant of the Magnolia Silk Mills has been awarded to the Hahn Construction Company of this city, and it is expected that the building will be completed within 60 days. It will be 50 by 200 feet, 1 story, brick, and will cost \$20,000, exclusive of machinery. When equipped, the plant will have a capacity of 1000 pounds of silk thread per week. Gordon Smith of Chattanooga is the architect.

T. Walter Fred is the president of the company, and E. E. Pickard is the general manager in charge of operations.

Fulton Bag and Cotton Mill Completing Power Plant.

Atlanta, Ga.—The Fulton Bag and Cotton Mill of this city has completed its new power plant building and has purchased a 3500 K. W., extraction type, steam turbo generator and switchboard. Installation will probably be made at once. J. E. Sirrine & Company of Greenville, S. C., are the engineers.

Plans are being promoted by A. R. Meadors of Fountain Inn, S. C., for the establishment of a cotton mill, knitting mill or other industry. It is stated that the establishment of a plant does not necessarily mean a cotton mill, but any other industry will be considered which will increase the pay roll of the town.

Commendations, Kicks and Comments

Gives Encouragement and Cheer.

REV. E. N. JOYNER, Edgefield, S. C.—Your enterprise, and what is more, and more admirable, your disinterested concern in the real progress of our country, our Southern portion especially, are striking and encouraging—and cheers up and on even a retired old parson, whose heart is still in its youth, and whose soul synchronous with the Race.

For True Men.

C. G. MCKINLEY, Chokoloskee, Fla.—I am 76 years old next August if I get to it and am very strong and healthy and do a lot of hard work. I was in the Civil War when I was between 17 and 18 on the Southern side of the business. I have so much to read I can't give your paper justice, while I say it is the best I ever read. It tells near all that a true man needs to know.

Predictions Fulfilled.

W. C. BRAY, Jacksonville, Fla.—Enclosed find \$6.50 order for 1923. I thank the RECORD for continuance of my copy and will try never to be without it. It is the best source of information I know of and I have lived long enough to see many of Mr. Edmonds' forecasts come true.

Regards to each of those who help maintain the high standing of the RECORD.

The Proper Spirit.

S. H. MOORE, Manager, Tampa-West Coast Realty Company, Inc. Tampa, Fla.—As a matter of fact, "we don't care what you charge;" we are going to advertise in your columns as long as we can pay our bill.

We consider the MANUFACTURERS RECORD an especially high class advertising medium, and feel that it is one of the greatest upbuilding agencies, or assets that the South has.

Editorials "Finest and Foremost" Says a Banker.

N. L. HOWER, Cashier, Franklin State Bank & Trust Company, Winnsboro, La.—I beg to take advantage of your offer by enclosing check for \$10.00 to renew my subscription for two years.

I consider your editorials the finest and foremost thought in the land. Those covering the Federal Reserve System were excellent, and the one covering the Mer Rouge horror in Louisiana a few weeks ago was the best that it has been my pleasure to read. My intention is to always have the MANUFACTURERS RECORD in my home.

A Virginia Attorney's View.

EMORY P. BARROW, Attorney at Law, Alberta, Va.—I am a consistent reader of the MANUFACTURERS RECORD, having for some years read a borrowed copy, which fact, however, made it no less interesting and instructive. I am sure I can frankly state that I get more real information from the MANUFACTURERS RECORD than from any other publication. Your fearless and exhaustive method of exposing the truth is the thing that keeps the MANUFACTURERS RECORD in the lead.

Fearless Exposition of Vicious Methods.

O. L. JOYNER, O. L. Joyner Company, Greenville, N. C.—I enclose my check for \$6.50 to continue my subscription to the MANUFACTURERS RECORD.

From the beginning of my business career, thirty years ago, I was an intermittent reader of the MANUFACTURERS RECORD. For the past three years; during which time, the business of this country has been going through the most terrible travail in its entire history, I have been a regular reader, and in my humble judgment, no man or agency in this country has rendered more invaluable service to the country, than you have done in uncovering the methods and schemes of the men in charge of the finances of our country.

Your fearless exposition of the heartless and inhumanly vicious methods employed by the Federal Reserve Board has done more to focus attention upon the ruthless power of this body of men, than any other influence in the country.

Others, no doubt, have had the knowledge of the power of oppression exercised by the Board, but you have combined courage with wisdom, and employed it in a most potential way in the interest of the seemingly forgotten hundreds of thousands of the plain, hard working, American people; many thousands of whom, have had their earnings of a lifetime, swept away in the mad maelstrom of gross mismanagement and incompetency.

Strength to your arm and a stout, courageous heart, is the hope for you, of many-many thousands, that you may continue the patriotic services you are rendering.

For the Right.

M. STOWERS, Pres. Stowers Lumber & Mfg. Company, Harriman, Tenn.—Enclosed is our check for \$6.50 to pay our renewal to the MANUFACTURERS RECORD. We must not fail to get each issue for the reason you stand so solid for the right.

A Hard Situation.

O. K. DAVIS, Secretary National Foreign Trade Council, New York.—The trouble with the Manufacturers Record is that it is altogether too interesting. I never see a copy of it that I do not want to read it all, and I am constantly in difficulty trying to get the time.

Of Inestimable Value.

H. G. RAY, Secy. & Mgr., Donaldsonville Oil Mill, Donaldsonville, Ga.—We have been a subscriber to your paper for several years and in our minds no one can estimate the value of your publication to our nation. May God give us more men like you who fear him more and humanity less in the spreading of the Gospel and truth in our land, where it is so badly needed.

A Good Distance Yet to Go Before He Gets There.

C. C. OLNEY, Manager, The Manhattan Rubber Mfg. Co., New Orleans, La.—We value the Manufacturers Record and what it stands for more keenly than the editor does and we get more in return than he does, and it is our hope that he lives far beyond his three-score years and ten so that he may enjoy the fulfillment of an effort to make America a good place to live in.

Fearless in Discussing National Problems.

WILLIAM C. GUTHRIE, Attorney and Counselor at law, Jacksonville, Fla.—My attention has recently been called to your paper and for the past several weeks I have devoured every issue.

I admire the fearless manner in which your paper discusses the great issues of the day.

Being afraid I may miss an issue I am herewith handing you my check for one year's subscription, together with my prayer that you will continue your work for the South and the nation as a whole.

A Word of Praise.

J. WILSON WOOD, Manufacturers Agent, Raleigh, N. C.—I have been a subscriber to the MANUFACTURERS RECORD, directly or through newspaper stands, for at least eighteen years. It is the old subscriber that knows Mr. Edmonds' attitude towards Americanism, which involves commercial, political and social advancement; and his unflinching stand to bring those institutions to par-excellence has from us ever a word of praise for him.

Impartial and Inspiring.

D. H. BANKS, Manager, Banks Ice & Ice Cream Company, St. Matthews, S. C.—I cannot help adding a word of commendation to those which you are daily receiving. Your inexhaustible campaign for the advertisement and development of the South should be enough in itself to place your magazine in the hands of every one interested in the South. I have learned to respect the editorials of the MANUFACTURERS RECORD as the most impartial and the most nobly inspired of any that come to my attention. May your good efforts ever bear the fruits they deserve.

Unbiased News as Antidote for Unrest.

WM H. COOPER, Mobile, Ala.—May your ideas reach many millions more of our good true American people each week. I wish your journal could be read by every man in the good old U. S. A., and at the same time that each and every qualified voter was put in a better position of reading such clear unbiased news at least once a month. This would do more to relieve the unrest of this country than anything else, unless it was more work for the unemployed, and I feel sure we have now enough unemployed to do the work needed in this country, if the laborers were properly distributed.

Right and Wrong the Only Consideration.

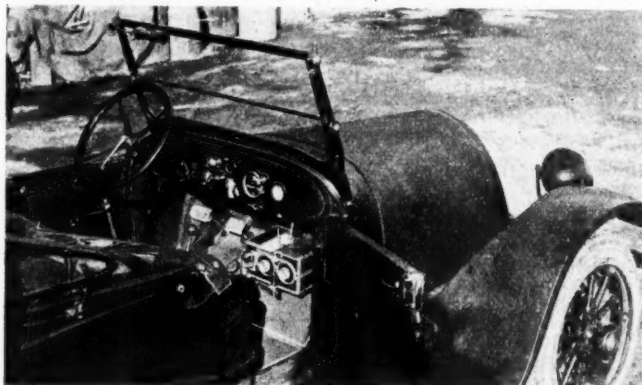
G. W. GARDNER, The Greenwood Daily Journal, Greenwood, S. C.—Enclosed you will please find check for the renewal of my subscription to your valuable publication. I hold the MANUFACTURERS RECORD in the very highest esteem, regarding it one of or the most valuable assets that we have in its fearless and noble stand for the things which can not be estimated in dollars and cents. It is biased neither by political nor any other consideration, when the question of right and wrong is at issue.

I have been reading it for years and expect to continue doing so. It gives me pleasure to assure you that I know several splendid citizens of Greenwood who have the same high opinion of the MANUFACTURERS RECORD that I have.

MECHANICAL

Road Surface Recording Instrument.

A recording instrument for the use of highway engineers and called the Vialog has been placed on the market; as its name implies it makes a record of the road surface when used on an automobile. In the accompanying picture one of these instruments is shown as applied to an inspection automobile of the New York State Highway Commission, the door being opened so as to give a view of it. The instrument is carefully designed and is compact, being installed on or near the dashboard. As it is constructed almost entirely of aluminum it is light in weight besides being strong. Within the box is a paper chart six inches wide driven by means



THE INSTRUMENT AS USED ON AN AUTOMOBILE.

of a flexible shaft that is connected to one of the front wheels, while the two recording pencils are actuated through a connection with the front axle. There is enough paper installed at one time for the inspection of eleven miles of road. A clutch allows the instrument to be either operated or disengaged at will.

While the automobile is running along the road the chart moves in direct ratio to the distance traveled, (one inch to fifty feet of road), and the recording pencils resting on the paper make a series of irregular or straight lines, according to the condition of the road surface, and thus locating, measuring and recording depressions and high spots as they are met. The moving paper chart is in plain view at all times so that the observer can sketch in notes of topography, etc., as the inspection proceeds. Besides, this also affords means for measuring the length of road, locating culverts, ditches, property lines, etc. In fact, a very comprehensive survey is possible.

Irregularities in the road are automatically summed up by the instrument and at any time their aggregate may be read while going along, while this information may be reduced to inches of irregularities per mile or roadway by simple calculation. This is useful for comparing various types of pavement or pavements of the same type but constructed at different times.

Harley Dunbar, an engineer employed by the New York State Highway Commission, invented the Vialog, which is manufactured and sold by the Universal Road Machinery Co., of Kingston, N. Y.

A Fire Cement for All Temperature.

A new fire cement has been developed and placed on the market under the name "Thermolith." It is the result of long experimentation in the research department of the Harbison-Walker Refractories Company, Pittsburgh, Pa., and it is stated that it was not brought out until it had been developed to a point where it was all that a fire cement should be, as a bond for fireclay brick. The company deter-

mined not to put out a fire cement until it had one that could be warranted.

This new cement, it is announced, sets hard and bonds fireclay brick firmly without heat. In other words, this new cement, it is claimed, remains absolutely a bond at all working temperatures; extreme heat neither fuses it nor crumbles it. It is a high temperature cement and a low temperature cement. Besides, it does not flux the brick at any working temperature, because it is chemically neutral and this identical quality enables it to resist the action of basic slag and clinkers. Furthermore, it is mechanically strong and withstands abrasion, either of furnace charge or of mechanical equipment, and in addition to this it is declared to be "fool proof," one cement for many purposes, being just as efficient for one heat as for another. Tests show it to be unfused at even the highest working temperatures and in abrasive tests it has been impervious to sand blasts of great force.

The manufacturers recommend the use of this improved cement for use in lining up fireclay brick in blast furnace and blast furnace stove linings, boiler settings and firebox arches; heating, forge and welding furnaces; copper, lead and zinc furnaces; cement, lime and pottery kilns; gas regenerator linings, glass pot furnaces and glass lehrs; brass furnaces and other miscellaneous uses. It is also of great value in patching and repairing fireclay brick construction, such as in boiler and gas generating practice where rapid and effective repairs are necessary to maintain uninterrupted service; besides it can be used effectively to coat refractory surfaces for protection against abrasion, corrosion or chemicals. It comes in dry powdered form, and is applied with a trowel after mixing with water. It does not need covering with water to prevent deterioration after the package is opened. It is packed in 200-pound metal drums.

FOREIGN NEEDS

[The MANUFACTURERS RECORD receives many letters from abroad asking for information about American goods, and others, from men who wish to represent American houses. Without assuming any responsibility for these concerns, we publish a summary of the foreign letters of inquiry from week to week.]

Agency Terms Desired.

PARSHOTAM DAS & SONS, Ram Gali, Lahore, India.—We are direct importers and exporters for the Punjab and N. W. F. provinces of this large country and we desire to hear from manufacturers and exporters who wish to sell their goods in India, concerning agency terms, etc.

Italian Business Law.

ITALO RONCHETTI-UMBERTO FABOZZI, VIA BOSSI 1, Milan, Italy.—To our organization as counsellors and attorneys at law we have added a foreign department to meet requirements of foreigners and foreign firms. Experience and knowledge of English, French and German enable us to deal with all matters concerning industrial, commercial and civil law in Italy. References on request.

Patented Machinery, Tools, Etc.

A. H. GOLDINGHAM, Mechanical Engineer, Tonnell Inn, Plainfield N. J.—I want to get in touch with American firms manufacturing "patented machinery or novel mechanical appliances for industrial purposes or special tools," who require representation in Great Britain and in the British export market. I have a friend in London for whom I am making inquiry who is a mechanical engineer with good selling facilities and a very good connection there.

Desire a Variety to American Goods.

ASIAN GENERAL TRADING CO., Sandhurst Road, Dina Building Bombay, India.—We desire additional connections with manufacturers and exporters, as well importers in the United States and other leading countries, wishing to secure connections on sole agency basis. We are particularly interested in toilet requisites, toys, watches, cutlery, hosiery, stationery, perfumery, pottery, glassware and chinaware, hardware, fancy goods, electric appliances, etc., provisions, patent medicines, piece goods, etc. etc. Our exports chiefly consist of raw products. Samples are far better than any other representation to effect sales. Can furnish high class references.

Construction Department

EXPLANATORY

Additional information is published about all enterprises mentioned in this department as soon as such data can be obtained. Further facts about any incomplete or incorrect item reported in these columns are always appreciated.

DAILY BULLETIN

The Daily Bulletin is published every business day to enable its subscribers to follow up promptly the industrial, commercial, railroad, financial, building and general business development of the South and Southwest. To machinery manufacturers and dealers, contractors, engineers, and others who require daily information of every new enterprise organized and details about important additions to enterprises already established, the Daily Bulletin is invaluable. Subscription price, \$20.00 a year.

Bridges, Culverts and Viaducts.

Ala., Carrollton—For full details see Road and Street Construction.

Fla., St. Petersburg—C. Perry Snell, contemplates building concrete bridge across mouth of Coffee Pot Bayou. (See Mch. Wanted—Bridge Construction.)

Georgia — State Highway Dept., Atlanta, Ga., plans constructing 3 bridges and appropriated funds as follows: Cobb-Fulton County, to improve Chattahoochee River Bridge, on Roswell road, \$60,000; Thomas County, bridge between Thomasville and Carlo, \$45,000; Pearce and Ware Counties, bridge over Satilla River, \$45,000; Counties to furnish equal amount.

Louisiana—Louisiana Highway Comsn., will build 3 bridges. For proposal details see Mch. Wanted—Bridge Construction.

Md., Mount Victoria—For full details see Land Developments.

Miss., Jackson—State Highway Dept., Jackson, plans building bridge across Pearl River, connecting Hinds and Rankin Counties; approximate cost \$50,000.

North Carolina—State Highway Comsn., Raleigh, will construct 3 bridges. For proposal details see Mch. Wanted—Bridge Construction.

N. C., Murfreesboro—State Highway Commission, Frank Page, Chmn., Raleigh, N. C., authorized constructing bridge over Meherrin River, on Murfreesboro to Virginia State line road, Hertford County, Proj. No. 149.

N. C., Troy—Montgomery County, Road Trustees, will build 2 bridges. For proposal details see Mch. Wanted—Road and Bridge Construction.

Tex., Bellville—For full details see Road and Street Construction.

Tex., Fort Worth—Tarrant County Commrs. Court, W. E. Yancy, County Auditor, let contract to Austin Brothers Bridge Co., Dallas, Tex., to build bridge over Ash Creek, on Azle road. (Lately noted.)

Virginia — State Highway Comsn., H. G. Shirley, Chmn., Richmond, Va., received low bids for 3 bridge projects as follows: 178, Route 1, Mecklenburg County, 122-ft. structural steel and reinforced concrete, over Grassy Creek, near Soudan, Roanoke Iron & Bridge Co., Roanoke, Va., at \$11,248; 160, B and C, Route 5, Nansemond County, 38-ft. reinforced concrete, over Kingsdale Swamp, near Carrsville, R. Stuart Royer, Greensboro, N. C., at \$6099; 209, Route 19, Goochland County, 152-ft. structural steel and concrete, over Bird Creek, Burgess & Atkinson, Scottsville, Va., at \$15,128. (Lately noted.)

Canning and Packing Plants.

Fla., Apalachicola—Wm. Lee Popham will establish oyster and fisheries plant; install conveying and canning equipment; Wm. G. Eager, Conslt. Engr., Valdosta, Ga. (Lately

noted. (See Mch. Wanted — Conveying Equipment; Canning Equipment.)

Ky., Middlesboro—New South Packing Co. increased capital from \$20,000 to \$500,000.

S. C., Woodruff—W. W. Anderson will install tomato canning plant.

Tenn., Athens—J. B. Adams will erect canning plant with daily capacity of 40,000 cans.

W. Va., Charles Town—International Fruit Products Co., reported interested in establishment of canning plant; cost about \$15,000.

Clayworking Plants.

Fla., Leesburg — Florida China Clay Co., Inc., capital \$100,000, inceptd. with R. L. Fox, Prest.; R. B. Bourlar, Secy.-Treas.

Md., Salisbury—Peninsula Brick Co. capital \$50,000, inceptd. by Glen Perdue, Harry S. Bradshaw, L. Atwood Bennett.

Va., Arlington—Hudson Brick & Supply Co., capital \$200,000, inceptd. with Henry W. Heine, Prest.; Edwin K. LaFover, Secy.; both of Washington, D. C.

Coal Mines and Coke Ovens.

Kentucky—Henry Ford, Detroit, Mich., has acquired 120,000 acres of undeveloped coal lands; reported to contain approx. 500,000,000 tons; will probably develop immediately; tract also contains about 500,000,000 ft. of timber.

Ky., Paintsville—Howard Elkhorn Coal Co., capital \$36,000, inceptd. by H. B. Sambaugh, Paintsville, L. C. Davidson, Huntington, W. Va. and others.

Ky., Providence—Young & Morgan Coal Co., organized with Edgar M. Young, Prest.-Mgr.; Jas. E. Morgan, Secy.-Treas.; has coal land under development, daily output 6 cars or 300 tons.

Md., Westernport—Donald Coal Mines, Inc., capital \$100,000, inceptd. by Roscoe J. Ross, Thomas D. Campbell, James F. Walsh.

Mo., Mindenmines—Clemens Coal Co., capital \$565,305, inceptd. by J. H. Clemens, D. W. Jones, Wm. Nesbit.

Tenn., Chattanooga—E. M. Jones, Mining Engr., James Bldg., plans developing coal lands.

Tex., Corsicana—Hamilton & Hooser, capital \$50,000; inceptd. by J. W. Hooser, J. G. Green and J. W. Hamilton.

W. Va., Fairmont—Preston Smokeless Coal Co., capital \$75,000, inceptd. by M. D. Simmonds, H. S. Keister both Fairmont; J. S. Maloy, Shinnston.

W. Va., Grantsville—Frank L. Bowman and Fred Tropf, of Morgantown, W. Va., acquired plant of Hess Coal & Coke Co. adjoining present holdings, will develop. (Lately noted Bowman Fuel Co., inceptd., capital \$150,000).

W. Va., Huntington—Cleveland Coal Co.

reported to erect overhead crossing and coal tipple at 26th St. and Ohio river, being a part of the river shipping plan involving approx. \$1,000,000 investment.

W. Va., Norton—West Virginia Coal & Coke Co., A. H. Crane, Secy., main office Elkins, W. Va.; will erect 50x120-ft. store, 30 x 60-ft. office, 40x80-ft. warehouse and 30x70-ft. machine shop, approx. cost \$50,000; construction by company; G. B. Southward, Chief Engr., Elkins, W. Va.

W. Va., Shinnston—White Rose Coal Co., capital \$75,000, inceptd. by Irwin Smith, H. J. Wagner and George Beck, all Smithton, W. Va.

Concrete and Cement Plants.

North Carolina—State Highway Comsn., Frank Page, Chmn., Raleigh, N. C., contemplates establishing and operating cement mill.

Tenn., Johnson City — Watauga Cement Products Corp., J. W. Warren, Mgr. will erect 40x70-ft. concrete building, fireproof; construction by own forces; has mch.; mfrs. concrete roofing tile, cast stone, sewer pipe, etc.; O. K. Morgan, Conslt. Engr. (Lately noted.)

Cotton Compresses and Gins.

Miss., Lux—Lux Gin Co., inceptd. by O. W. Copeland, L. H. Brown and others.

Mo., Hayti—Hayti Compress Co., capital \$100,000, inceptd. with R. L. Taylor, Prest., Memphis, Tenn.; I. Kohn, Hayti, V. P.; A. J. Mathews, Secy., Russellville, Ark.; has 17 acre site and will erect 2000 ton capacity compress. (Previously noted.)

Mo., Malden—Malden Compress Co., capital \$100,000, inceptd. with R. L. Taylor, Prest.-Gen. Mgr., Memphis, Tenn.; will erect cotton compress, equip with modern mch.; capacity 30,000 bales.

Mo., Sneath—Earl Vandiver plans erecting cotton gin, daily capacity from 40 to 50 bales.

Drainage Systems.

Fla., Tampa—Interbay Drainage Dist. Commissioners, Hillsborough County contemplates constructing canals, reclaiming about 13,000 acres; plans be made about July 1; McElroy Engineering Co., Engrs.

Electric Light and Power Plants.

Fla., Marianna—Marianna Light & Power Co. has begun construction of hydro-electric power plant; develop 3000 primary horsepower.

Ga., Donalsonville—For full details see Sewer Construction.

Ga., Eatonton—Putman Mills & Power Co. will probably develop 750 H. P. this year.

Ky., Barbourville—For full details see Land Developments.

La., Plaquemine—For proposal details see

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Mchy. Wanted—Water Works and Electric Light Plant.

Miss., Belzoni—For full details see Water Works.

Miss., Cruger — For proposal details see Mchy. Wanted—Electric Lighting System.

Mo., Benton—Missouri Public Utilities Co., Cape Girardeau, Mo. will extend line to Benton, furnishing electric lighting current.

Mo., University City—For full details see Land Developments.

N. C., Albemarle—Almond Light & Power Co., capital \$100,000, inceptd. by Jethro Almond, J. T. and David P. Dellinger.

N. C., Blowing Rock—Blowing Rock Light & Power Co., capital \$125,000, inceptd. by T. H. Coffee, D. A. Burkhardt, W. L. Alexander.

Okla., Chickasha—Chickasha Gas & Electric Co., F. D. Shaffer, Mgr. Will construct electric line to Ninnekah and Rush Springs.

N. C., Granite Falls—Town Commrs. will begin construction of white way about April 2.

N. C., Whitakers—W. T. Hearne is receiving bids for construction of 5½ mi. electric transmission line.

Okla., Tulsa—Grand River Power Development Co., 307 Mayo Bldg., Royal D. Salisbury, Engr. in Charge, will expend \$30,000,000 in development of 250,000 H. P.

Tex., Tenaha—Center Electric Light & Ice Co., Center, Tex., purchased Tenaha plant.

Va., Norfolk—Reliance Electric Co., F. W. Sharp, Prest. increased capital from \$100,000 to \$150,000.

Fertilizer Plants.

Ga., Summerville—C. F. Hoffman of Gadsden, Ala., purchased plant of Standard Chemical Co. and will operate.

Ark., Fort Smith—Fort Smith Cotton Oil Co., North First and G Sts. will erect plant; ordinary mill construction; install \$30,000 fertilizer plant. Lately noted. (See Mchy. Wanted—Fertilizer Mixing Mchy.)

S. C., Columbia—Kuykendal Chemical Co increased capital from \$50,000 to \$100,000.

Tenn., Nashville—Bon Air Chemical Co., incorporated by M. P. O'Connor, Paul E. Griffith, Frederick Leake.

W. Va., Fairmont—Marker Chemical Co. capital \$1,000,000 inceptd. by R. L. Long and S. S. Burke, Fairmont; Earl Van Horn, Clarksburg.

Flour, Feed and Meal Mills.

Mo., Kansas City — Davis-Noland-Merrill Grain Co., capital \$400,000, inceptd. by G. H. Davis, N. F. Noland, H. A. Merrill.

Mo., Speed—Speed Farmers Elevator Co.,

capital \$10,000, inceptd. by G. K. Crawford, D. E. McArthur, C. W. Chamberlain.

S. C., Pacolet—Patterson Feed Co., capital \$10,000, inceptd. with C. C. Gossett, Prest.; J. R. Patterson, Secy.-Treas.

W. Va., Williamson—Looney Milling Co., Elsie Looney, Gen. Mgr., has erected flour mill with an output of 50 bbl. of flour, 100 bu. meal, 150 bags, cr. corn, 80 bgs. middlings. See Mchy. Wanted—Grain.

Foundry and Machine Plants.

Ala., Birmingham—Bolts, etc.—Bessemer Coal, Iron and Land Co., W. T. Badham, contemplates the erection of plant for mf. of stove bolts, wood screws, etc.

La., Monroe—Ouachita Iron Works, Inc., capital \$40,000, inceptd. by M. W., L. J. and J. B. Anthony.

Mo., Independence—Morgan Foundry Co. inceptd. by I. E. Morgan, G. H. English.

Mo., Kansas City — Electric Furnace & Equipment Co., capital \$300,000, inceptd. by H. J. Plagens, H. N. Olson, F. H. Longacre.

Mo., St. Louis—Great Western Iron & Metal Co., capital \$15,000, inceptd. by Gus Gillerman, Dave Zwielman, Sam Goesser.

Mo., St. Louis—St. Louis Steel Products Co., capital \$40,000, inceptd. by A. E. Coates, W. F. Coates, Eunice P. Lowe.

Tenn., Memphis—Pidgeon-Thomas Iron Co., S. Main St. has plans by E. L. Harrison, Archt. and Engr. for completion of the remaining units of the general plant; all fire-proof construction.

Tex., Houston — Ship Channel Machine Shop, capital \$60,000, inceptd. by C. L. Nash, J. P. Fuesler and R. C. Fullbright.

Va., Portsmouth—Downie Co., Inc., capital \$200,000, inceptd. with Charles E. Downie, Prest., Pomeroy, Ohio; K. D. Ransom, Treas., Newport News; have acquired building at Duke and Chestnut Sts. will remodel for the mf. of motor cultivators, gasoline plows, etc.; mchy. all purchased; C. C. Clark, Supt.

Va., Portsmouth — American Brake Shoe Foundry Co. let contract to The Virginia Construction Co. at \$21,600 to erect 1 story iron foundry on Old Shell rd. (Lately noted.)

Gas and Oil Enterprises.

Ky., Ashland—Iley Browning and associates interested in organizing company to erect refinery in East Ashland.

Ky., Barbourville—For full details see Land Developments.

La., Monroe—Zeiglin-Clarke Oil & Gas Co., lately noted inceptd. with \$150,000 capital, by G. W. Zeiglin, W. B. Clarke and Robt. M. Breard, will construct plant with capacity

10,000,000 ft. gasoline; cost \$70,000; 2½ mi. 6 inch pipe line; Henry Walton, Engr.; plans also include drilling of 9 wells and building 10 mi. of pipe line in course of three years to supply Gulf Carbon Co. with extracted gas.

Mo., Kansas City—Marshall Refining Co., capital \$49,000, inceptd. by D. B. Sevastian, Clifford Off, W. S. Primley.

Okla., Cushing—Illinois Refining Co. will construct line from Cushing to Tonkawa field; distance of 60 mi. with capacity of 5000 bbls.; will construct pump station at Summer; cost about \$250,000.

Okla., Duncan—Ellis Drilling Co., capital \$40,000, inceptd. by S. R. Ellis, Duncan; Walter M. Priddy, J. R. Elliott, Wichita Falls, Tex.

Okla., Enid—Healdton Oil & Gas Co., Thad Eason, Prest. will construct 4-in. pipe line from Tonkawa to Enid; capacity 5000 bbls.; cost \$200,000. (Lately noted.)

Okla., Muskogee—Gladiator Petroleum Co., capital \$150,000, inceptd. by J. A. and M. M. DeWitt, Muskogee, L. R. Smith, Oklahoma City.

Okla., Newkirk—R. S. Ayres of Chicago, Ill. acquired Pirtle-Pittman Oil Co. together with 20 acres of land, 10 mi. of pipe line and pump station; will construct pipe line to Burbank field and operate refinery; Charles Virtue of Chicago, Supt. of production; Geo. Turner, Refinery Supt.

Okla., Tulsa—Tulsa Royalty Purchasing Co., capital \$100,000, inceptd. by C. D. Coggeshall, H. F. Wilcox, M. H. Calvert.

Okla., Tulsa—M. M. Valerius Oil & Gas Co., capital \$2,000,000, inceptd. by M. M. Valerius, H. F. Wilcox, M. P. Appleby.

Tex., Breckenridge—Gulf Production Co. will construct 6 casinghead gasoline plants; will treat about 40,000,000 cu. ft. of natural gas daily, extracting 60,000 gals. gasoline; construction of first plant underway; total cost \$2,500,000.

Tex., Fort Worth—H-Y Oil Co., capital \$7000, inceptd. by J. R. Hill, T. B. Yarborough, F. E. King.

Tex., Hull—Lackey Oil Co., capital \$40,000, inceptd. C. H. Lackey, J. A. Rudd, Jr., John McGoughy.

W. Va., Charleston—Commercial Gas Co., capital \$100,000, inceptd. by E. H. Shonk, A. J. Humphreys, J. C. Blair.

W. Va., Weston—Big Otter Oil & Gas Co., capital \$50,000, inceptd. by Tracey M. Caine, H. Raymond Craig and Lawrence B. Harris.

Ice and Cold-Storage Plants.

Ga., Dublin—O. E. Johnson, Hawkinsville, Ga., acquired plant of Homer Moore, has equipment, daily capacity 20 tons.

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MANUFACTURERS RECORD

BALTIMORE, MD.

Ky., Providence—Providence Ice Co., capital \$30,000, inceptd. by W. B. Snow, F. V. and D. J. Ruckman.

Mo., Jasper—Jasper Electric Light Co. will establish ice plant.

N. C., Cooleemee—Cooleemee Ice & Laundry Co., capital \$100,000, inceptd. by J. W. Zachary, J. S. Trowd, L. P. Latham.

N. C., Raleigh—City Coal & Ice Co., capital \$25,000, inceptd. by A. C. and Viola E. Cornett, O. V. Cooper.

Tenn., Nashville—Consumers' Ice Co., J. M. Wilkerson, Prest. let contract to J. F. Turk & Co. to erect ice plant; concrete and brick construction; install electrically operated mchy. mfr. raw water ice; M. P. Burt & Co., Engr., Memphis, Tenn.

Tex., Austin—J. C. Rusk and L. L. Stephenson, both San Antonio, Tex. purchased plant of Lone Star Ice Mfg. Co.; will operate.

Tex., Dickinson—Dickinson Ice & Fuel Co. increased capital from \$20,000 to \$30,000.

Tex., Port Arthur—Port Arthur Grain Co., W. A. Kavanaugh, Mgr. let contract to Herman Weber, Beaumont, Tex. to erect \$20,000 fireproof building, install \$15,000 cold storage equipment, all purchased; increased capital to \$20,000.

Tex., Gonzales—Stahl Bros. let contract to M. A. Wade to erect 110x150-ft. cold storage plant; install about 9 ml. high tension power line to transmit about 600 H.P. (See Mchy. Wanted—Power Transmission Line Equipment.)

Tex., Harlingen—Valley Produce & Cold Storage Co., capital \$15,000, inceptd. by R. H. Cameron, O. W. Jones and H. F. Shaper.

Land Developments.

Ala., Bessemer—Bessemer Coal, Iron & Land Co., is expending \$100,000 in improvements to land for home sites, constructing streets, drainage, etc.

Ala., Tuscaloosa—Birmingham Plan Co., Inc., capital \$100,000, inceptd. by Howard M. Fulenruder, Henry L. Badaham and Hayse Tucker.

D. C., Washington—Raleigh Investment Co., Inc., capital \$25,000, chartered by Henri Gagnon, Arthur H. Lehman, Henry C. Lank.

Fla., Altamonte Springs—Altamonte Fern Co., capital \$15,000, inceptd. with Geo. C. Hall, Prest.; Albert Cline, Secy.-Treas.

Fla., Bradentown—Bradentown Development Co., capital \$25,000, inceptd. with H. K. Tallant, Prest.; H. D. Horney, Treas.

Fla., Fort Myers—Leeco Growers & Packers, Inc., chartered with C. J. Stubbs, Prest.; K. A. Leitner, Secy.

Fla., Miami—Tamiami Lands Corp., capital \$150,000, chartered with M. A. Leddy, Prest.; John C. Gramling, Secy.-Treas.

Fla., Miami—For full details see Water Works.

Fla., Miami—Miami Investment Co., capital \$10,000, inceptd. by P. G. Dusenbury, Ben P. Richardson, G. L. Miller of Atlanta.

Fla., Nokomis—Nokomis Realty Co., capital \$200,000, inceptd. with Fred H. Albee, Prest.; Lillian A. Nash, Secy.

Fla., Redland—Redland-Groves-Homes Co., capital \$350,000, inceptd. with Geo. A. Reynolds, Prest.; W. H. Messiner, Secy.

Fla., St. Petersburg—Boulevard & Bay Land Development Co., capital \$2,000,000, inceptd. with C. J. Seelman, Prest.; Fred Blair, Secy.-Treas.

Fla., Tampa—Parker Orange Grove, Inc., capital \$200,000, inceptd. with E. W. Parker, Prest.; M. G. Gibbons, V. P. and Secy.

Fla., Tampa—Lake Magdalene Co., capital

\$200,000, inceptd. with Thad Butler, Prest.; C. E. Thompson, V. P. and Secy.

Fla., Tavares—George S. Marsh, Jr. of Orlando, Fla., acquired 103 acres on Lake Eustis and will develop for citrus grove; initial development 51 acres.

Fla., West Palm Beach—St. Lucie River Country Club, organized with Joe Vendig of Port Sewall, Prest.; Allen Fletcher, Secy.; will develop tract of 100 acres for 18-hole golf course; plans by Langford and Moreau, Chicago, Ill.; will also construct clubhouse.

Fla., West Palm Beach—Wm. G. Warden, E. T. Stotesbury, Vice Prest. both of Phila., Pa. and Edwin Shearson, of New York, Secy., of company organized to construct golf course on Lake Worth; will expend \$500,000 in improvements; construct clubhouse, etc.; Donald Ross, Golf Course Engr., will supervise construction.

Fla., West Palm Beach—South Indian River Co., capital \$300,000, inceptd. by B. J. Corkberg, Frank Rowe, Stafford B. Beach; develop subdivision.

Ky., Ashland—Boyd County Realty Co., capital \$300,000, inceptd. by J. C. Miller, T. A. Field, Robt. T. Caldwell.

Ky., Barbourville—Barbourville Realty Co., capital \$14,000, inceptd. with Dr. John G. Lye, Prest.; John C. Main, Mgr.; has 80 acres and will develop for subdivision; will install gas and electric lights; sewer system; water works; roads and streets, etc.; will expend several thousand dollars in improvements; John C. Main and L. T. Faulkner, Const. Engrs. (Lately noted.)

Md., Baltimore—Baltimore Development Co., 561 Calvert Bldg., capital \$50,000, inceptd. by Frank B. Banister, John W. Carey, Edmund P. Russell.

Md., Baltimore—Northern Realty Co., 616 S. Charles St., capital \$50,000, inceptd. by Solomon Rones, Julius and Simon Cohen.

Md., Baltimore—Armstrong Developing Corp., Inc., 704 Union Trust Bldg., capital \$15,000, inceptd. by C. Stanley Armstrong, Geo. R. Beneman, Milton W. King.

Md., Easton—Easton Real Estate Corp., capital \$40,000, inceptd. by M. Tilghman Johnston, T. Hughes Henry, Wm. Shehan.

Md., Mount Victoria—Cobb Island Development Co., F. B. Bannister, 561 Calvert Bldg., Baltimore, and Robt. Crain, Mount Victoria, interested, plans to develop Cobb Island, containing 344 acres with 8 ml. water front; will provide 1500 building sites and erect number of dwellings on portion and hotel; will build roads, sidewalks, etc. and considering installing septic tanks; will build bulkheads and bridge connecting Island with mainland to connect with proposed Crain Highway; has installed saw mill and will develop timber preparatory to beginning building operations; cost about \$500,000.

Mo., St. Louis—Clayton Road Terrace Realty Co., capital \$30,000, inceptd. by F. X. Cain, A. H. Murphy, L. J. Wilson.

Mo., St. Louis—A. R. Schollmeyer Real Estate Co. acquired and will develop Krummel tract for subdivision.

Mo., St. Louis—The Levitt Corp., capital \$25,000, inceptd. by I. M., S. and Ida Levitt.

Mo., St. Louis—Golf Construction & Development Co., inceptd. by S. C. Hardin, E. J. Coff, A. M. Wernig.

Mo., University City—Tegethoff & Vatterott Realty Co., capital \$100,000, inceptd. by Vernon Tegethoff, Prest.; Chas. F. Vatterott, Jr., will develop 39 acres on Etzel and Texgeson Aves. for subdivision; install electric lights; sewer system; asphalt streets, curb and gutter; expend \$150,000; Egon Rapp, Const. Engr., Clayton, Mo.

Mo., Webster Groves—Webster Groves Investment Co., capital \$50,000, inceptd. by H. Schulz, W. A. Straub, A. E. Blackmer.

N. C., Asheville—Guarantee Realty Co., capital \$100,000, inceptd. by D. L. Strain, L. B. Jackson, J. F. Jenkins.

N. C., Charlotte—Acme Development Co., capital \$25,000, inceptd. by O. S. Asbury, F. M. Hamilton, J. L. Woodside.

N. C., Charlotte—General Equipment Co., capital \$50,000, inceptd. by C. W. and H. O. Allison, N. J. Orr.

Okla., Ponca City—City will develop 20-acre tract in northwestern section for park. Address The Mayor.

Okla., Sapulpa—City has \$85,000 available for development of city parts. Address The Mayor.

Okla., Tulsa—The Fleetwood Co., inceptd. with W. M. Fleetwood, Prest.; R. C. Holloway V. C.; Mabelle DeShetler, Secy.-Treas.; have acquired 24 acres on east side of city and will develop for industrial section, will construct hard surface roads through addition, build 3 lead lines from Frisco Ry., lay sewers, etc.; expend about \$100,000.

S. C., Camden—Camden Country Club has plans by Walter J. Travis for development of 18-hole golf course.

S. C., Greenville—City, H. C. Harvley, Mayor, will vote April 4 on \$110,000 bonds for acquiring, enlarging and maintaining parks.

S. C., Lawrence—Kennedy-Gibson Co., incorporated with F. N. Kennedy, Prest.-Secy.; M. D. Gibson, V.-P.

S. C., Rockhill—Catawba Real Estate Co. increased capital from \$100,000 to \$200,000.

Tex., Dallas—Greenland Hills Realty Co., capital \$300,000, inceptd. by F. L. and F. F. McNeny, H. D. McElroy.

Va., Lovingsston—Eagle Mountain Orchard, Inc., capital \$50,000, inceptd. with E. L. Eakle, Prest.; Waynesboro, Va.; H. D. Mawyer, Secy., Richmond.

Va., Roanoke—Crystal Springs Land Co. will expend about \$50,000 for street, water and sewer improvements in development of subdivision; will also erect number of dwellings.

Lumber Manufacturing.

Ala., Montgomery—Jones-Cabler Lumber Co., capital \$15,000, inceptd. by Herman Jones, J. E. Cabler and C. B. Matthews.

Ala., Montgomery—Coats Lumber Co., capital \$25,000, inceptd. with W. B. Coats, Prest.; Lee I. Betty, Secy.-Treas.

Ala., Tuscaloosa—Deal-Persons Planing Mill Co., capital \$10,000, inceptd. by S. E. Deal, C. P. Persons and S. G. Carshuff.

Fla., Jacksonville—Smith Logging Co., capital \$10,000, inceptd. with J. S. Lanier, Prest.; B. Bruce, Secy.-Treas.

Fla., Jacksonville—United Lumber & Remilling Co., capital \$10,000, inceptd. with G. W. Treziyulny, Prest.-Treas.; Robt. T. Dewell, Secy.

Fla., Jacksonville—Baker Fentress & Co., 208 S. LaSalle St., Chicago, Ill. and Gillican-Chipley Co., New Orleans, La. will develop 1,000,000 acres long leaf yellow pine timber. For full details see Miscellaneous Factories.

Fla., Tampa—Ansley Lumber Co. will erect wharves, warehouses and import and export sheds, etc.; leased 300 ft. of wharf frontage.

Ga., Donalsonville—Husbands-Shingler Lumber Co., capital \$10,000 inceptd. by W. C. Husbands, Joe M. Shingler and others.

La., Monroe—Pratt Lumber Co., capital \$20,000, inceptd. with T. B. Pratt, Prest.; T. B. Pratt, Jr., Secy.-Treas.

Miss., Jackson—Hub Lumber Co., capital \$20,000, inceptd. by G. R. Odom, M. A. Frye and C. E. Fairley.

Miss., Waynesboro—Muse Lumber Co., R. C. Muse, Mgr. acquired plant of Bonney Lumber Co., including timber holdings in Wayne County; will install hardwood dept., and make other improvements, increasing capacity of plants.

Mo., Boonville—Dascomb-Daniels Lumber Co. will improve and enlarge plant.

Mo., Webb City—Coyne Lumber & Supply Co., capital \$20,000, inceptd. by T. F. and Roy Coyne, W. W. Davis.

N. C., Elizabethtown—DeVane-Hall Lumber Co., main office Huske Bldg., Fayetteville, N. C. (lately noted inceptd., capital \$100,000) organized with John M. DeVane, Prest.; Thos. A. DeVane, Secy.-Treas.; Geo. H. Hall, Jr., Mgr.; will erect mill construction building erected by own forces; install planers, trimmers and edgers; daily output 30,000 ft. lumber. (See Mch. Wanted—Boiler; Trimmer.)

N. C., Mebane—Fitch-Biggs Lumber Co., capital \$50,000, inceptd. by W. T. Riggs, A. B. and R. B. Fitch.

S. C., Bucksport—Huntley-Richardson Lumber Co., D. V. Richardson, Secy.-Treas. will expend about \$50,000 to \$75,000 on erection of plant for mfr. of hardwood lumber; open bids about April 1; install saw mill mch. Lately noted. (See Mch. Wanted—Saw-Mill Machinery.)

Tenn., Cumberland City—Scott Tie Co., Paducah, Ky., purchased 500 acres timber land.

Tex., Conroe—Bennette-Davison Lumber Co., increased capital from \$30,000 to \$160,000.

Tex., Dallas—Clem Lumber Co., increased capital from \$300,000 to \$650,000.

Tex., Deweyville—Siler-Lewis Lumber Co., capital \$25,000, inceptd. by W. S. Siler, H. W. McCurley, A. L. Ferguson.

Va., Pulaski—F. W. White Lumber Co., Inc., increased capital from \$20,000 to \$100,000.

Metal-Working Plants.

Md., Baltimore—Maryland Meter Works, Edmund S. Dickey, Gen. Mgr., 224 Holiday St., let contract to West Construction Works, American Bldg. at \$100,000 to erect 7 story building, 38x82-ft.; Theodore W. Pietsch, Archt. (Lately noted.)

Mo., Kansas City—Radio Instruments—The Heart of America Specialty Co., capital \$10,000, inceptd. by H. L. Hart, J. R. Mullins, H. J. Miller.

Mo., St. Joseph—Tungsten Spark Plug Co., capital \$75,000, inceptd. by A. F. Trost, W. A. Seymour, L. E. Wilson.

Mo., St. Louis—Plan Well Products Corp., capital \$25,000, inceptd. by T. S. Wells, H. L. Salinger and others.

Mo., St. Louis—McQuay Radiator Corp., incorporated by T. L. Croteau, M. A. Bruce, A. M. Hooven.

Tenn., Chattanooga—Crane Enamelware Co. will expend several hundred thousand dollars on plant improvements, enlarging the production capacity.

Tex., Dallas—Standard Spring & Axle Co., 2816 Main St. (lately noted inceptd. \$30,000) organized with L. K. Weaver, Prest.-Mgr.; J. W. Hall, Secy., let contract to Gus Henderson to erect 50x100-ft. brick building, fireproof, approx. cost \$10,000; install mch. for mfr. of automobile springs. (See Mch. Wanted—Spring Working Machinery.)

Tex., San Antonio—Alamo Radio Electric Co., capital \$20,000, inceptd. by J. C. Rodriguez, G. T. Atchinson and W. G. Egerton.

Tex., Waco—Diamond Steel Highway Sign Co., capital \$200,000, inceptd. by M. R. Thrallkill, E. A. Decker and E. L. McGill; mfr. steel highway markers.

Va., Richmond—Metal Window Mfg. Corp., Hermitage Road, chartered with Chas. T. Norman, Prest.; Ed. Whitlock, Treas.; Chas. N. Williams, Jr., Secy.; has plant; organized to mfr. the product of the Peerless Metal Window & Shutter Corp.

Mining.

Mo., Joplin—Mogul Mining Co., A. E. Dunlap, Gen. Mgr., Miami, Mo., will erect concentrating plant; has leased addition property, formerly called the Redbird, erect 200 ton mill, to be somewhat larger than one recently burned.

Mo., Joplin—Cherokee Lead & Zinc Co., capital \$200,000, inceptd. by J. P. Hefferman, C. F. Dike, Lon Mullin.

Okla., Miami—Gordon Mines Corp., capital \$100,000, inceptd. by Vern E. Thompson, Miami; A. C. Moses, Joplin, L. W. Dinnie, Chicago.

Okla., Picher—Whisk Broom Mining Co., capital \$36,000, inceptd. by A. C. Moses and A. C. Childress both Joplin, Vern E. Thompson, Miami.

Tenn., Johnson City—Appalachian Gold Mining Co., Inc., capital \$250,000, inceptd. by W. T. Swower and others.

Tenn., Sneedville—Zinc — Arizona Triple Mountain Co. acquired 14,000 acres land in Hancock County; will develop zinc holdings; let contract to C. P. Davidson, Middlesboro, Ky., to build 20 mi. railroad to property following the Big Sycamore Creek.

Miscellaneous Construction.

Fla., Jacksonville—Incinerator—City Commission let contract to Nye Odorless Crematory Co., Macon, Ga. at \$72,000 to erect 80-ton capacity incinerator at Eighth St. and Deer Creek. (Lately noted.)

Fla., Miami—Channel—For full details see Water Works.

Fla., Tampa—Storage Tanks—Sunoil Co. purchased site with 300 ft. of wharf frontage, will erect 5 oil storage tanks, built with high concrete retaining walls.

Fla., Tampa—Wharf, etc.—Swann Terminal Co., James T. Swann, Prest. has plans completed for construction of 8 story warehouse, fireproof, equipped with automatic sprinklers, containing storage rooms, refrigeration plant, electric escalator, and all modern equipment, estimated cost \$500,000; other improvements include wharf facilities, trackage, warehousing, etc. to be completed within next two years, total expenditure about \$2,000,000.

Fla., Tampa—Swimming Pool, etc.—Temple Terraces, Inc. let contract to Temple Terraces Construction Co. to build swimming pool, turkish bath, pavillion for dancing and afternoon tea; approx. cost \$100,000. (See Mch. Wanted—Tile.)

Ky., Hickman—Levee — Mississippi River Comsn., International Life Bldg., will expend \$130,000 on revetting bank of Mississippi river.

Md., Mount Victoria—Bulkhead—For full details see Land Developments.

Mo., Kirkwood—Standpipe—For proposal details see Mch. Wanted—Standpipe Construction.

Miss., Greenville—For proposal details see Mch. Wanted—Levee Construction.

Tex., Brownsville—Dredging—U. S. Army Engrs. let contract to John Jacobson, Galveston, Tex. to dredge inner and outer channels for a harbor at Point Isabel.

Tex., Houston—Wharves, etc.—Anderson Clayton & Co. let following contract for \$1,000,000 shipside cotton warehouses, compress and wharves on Houston ship channel; to J. B. Townsend at \$540,000 for foundations and construction of buildings; and to Tom Tellepsen for 1500 ft. concrete wharf. (Lately noted.)

Va., Berkley, Sta. Norfolk—Pier, etc.—Imperial Tobacco Co. will erect additional units to plant, consisting of 600 ft. covered steel and concrete pier, also storage warehouse; estimated cost \$500,000; will probably dredge 35-ft. channel from pier to main channel, approx. removal of 100,000 cu. yds. material; Neff & Thompson Engrs.

Miscellaneous Enterprises.

Fla., Fort Lauderdale—Livestock — Pine Island Cattle Co., capital \$100,000, inceptd. with John M. Bryan, Prest.; G. B. Skipper, Secy.-Treas.

Fla., Homestead—South Dade Publishing Co., Benjamin E. Archer, Prest., Florida City, Fla., (lately noted inceptd., capital \$10,000) let contract to Frank Umphrey to erect 40x60x12-ft. building, cement block, composition roof; install job presses, general printing equipment, etc. (See Machinery Wanted—Printing Equipment, etc.)

Fla., Jacksonville—C. and T. Engraving Co., capital \$10,000, inceptd. with Charles W. Lienau, Prest.; Carl Paulander, Secy.

Fla., Jacksonville—Engineering — R. E. Bloomfield & Co., capital \$25,000, inceptd. with R. E. Bloomfield, Prest.; Julius Gundlach, Secy.

Fla., Miami—Engineering—Economy Electric Co., Inc., capital \$25,000, chartered with J. A. Raymond, Prest.; Julian L. Herren, Secy.

Fla., Miami—Fire Equipment—For full details see Water Works.

Fla., Miami—Undertakers—W. H. Combs Co. acquired 82x100-ft. site at 2nd Ave. and 15th Terrace, will remodel buildings, funeral home will be in Spanish design with open court through center, Spanish gates, arches, balconies etc.; total expenditure \$65,000; John H. Sculthorpe, Archt.

Ky., Louisville—Louisville Building Supply Co., increased capital from \$30,000 to \$150,000.

Ky., Mayking—Old Regular Baptist Publishing Co., inceptd. by S. T. Wright, and Ella Adams, Mayking; J. B. Adams, Millstone, Ky.

La., Monroe — News-Star Publishing Co., Ltd. North 2nd St., let contract to Lee A. Ellis to erect 2 story brick and stone building and make extensive improvements to existing plant, entire front of 66 ft. will be faced with red matt brick with ornamental carved frieze, extending across both new and old portions of plant; building will be mill construction throughout, windows of steel and wire glass, saw-tooth skylight will light the composing room; install additional equipment; William Drago and Milton L. King, Associate Archts. (Previously noted.)

Md., Baltimore—Contractors — Reynolds-Sprague, Inc., 17 N. Guilford Ave., capital \$50,000, chartered by James M. Reynolds, Harry Sprague and others.

Md., Baltimore—Hotel Hermann Co., 400 W. Pratt St., capital \$20,000, inceptd. by Harry O. Dubner, Frederick C. Dubner, Ella L. Linck.

Md., Baltimore—McKenney Transfer Co., 101 S. Frederick St., capital \$10,000, inceptd. by Michael McKenney, Clarence Wright, and others.

Md., Frederick — Abattoir — Frederick County Product, Inc., capital \$250,000, in-

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

corporated by Joseph A. Whitfield, Daniel T. Dutrow, Harry B. Wilson.

Md., Rossville—P. O. Stemmers Run—Back River Bus Co., capital \$10,000, inctpd. by Henry Altevoigt, George W. Evans, John G. Goertz.

Mo., Kansas City—Advertising—Triangle Sign Co., capital \$50,000, inctpd. by J. Woodhead, E. G. Trimble, G. H. Foster.

Mo., Kansas City—United Warehouse Co., capital \$25,000, inctpd. by A. S. Parks, A. F. Jones, J. H. Brugh.

Mo., Poplar Bluff—Energy Construction Co., capital \$50,000, inctpd. by A. W. Robertson, H. G. Ellis, L. L. Taylor.

Mo., St. Louis—Brighton Construction Co., capital \$50,000, inctpd. by O. S. Brighton, J. A. McKeown and others.

Mo., St. Louis—Universal Sign Co., capital \$25,000, inctpd. by Ben Widmer, Dr. C. E. Wieser, H. A. Muetze.

Mo., St. Louis—Eagle-Litho Engraving Co., Inc., chartered by E. A., Dora L. and E. O. Heinicke.

Mo., St. Louis—Construction — Powell-Gaussen Co., capital \$14,500, inctpd. by L. E. Spillman, A. C. Gaussen, A. C. Powell.

Mo., St. Louis—Electrical Appliances—Clifton Sales Co., Inc., capital \$10,000, incorporated by E. A. Heinicke, E. O. Heinicke, E. B. Teacher.

Mo., St. Louis—Construction — Western Supply Co., capital \$30,000, inctpd. by A. J. Marr, F. B. Rafferty, O. C. Marquitz.

Md., Salisbury—Wicomico Hotel Co., capital \$250,000, inctpd. by Fred P. Adkins, Israel L. Benjamin, Hooper S. Miles.

N. C., Kings Mountain—Kings Mountain Co-operative Sweet Potato Storage Co., A. B. Putman, Mgr., will erect 120x40-ft. building; construction by local labor; annual capacity 1,000,000 bu. (Lately noted.)

N. C., Selma—Hardware Store, Inc., capital \$50,000, inctpd. by J. D. Massey, E. V. Deans of Selma, C. L. Richardson, Durham.

N. C., Winston-Salem—Piedmont Engraving Co., established by G. H. Rider and Melville Prongay; leased space in Masten Bldg.; plant will handle photo-engraving, etc.

S. C., Union—Care-Co. Laboratories, Inc., capital \$150,000, chartered with J. B. Buchanan, Prest.; E. C. Lindfors, Secy.-Treas.

Tenn., Knoxville—Knoxville Fireproof Storage Co., capital \$300,000, inctpd. by E. E. McMillan, Hu M. Hohnston and J. W. Sullivan.

Tenn., Knoxville—Arnold Apartment Corp., capital \$150,000, inctpd. by Charles L. Dooley, C. A. Gillespie and Floyd E. Haun.

Tenn., Nashville — Co-operative Creamery Assn. is erecting icing and milk receiving station 3rd and Demombreum Ave.; cost \$10,000.

Tex., Dallas—National Mercantile & Printing Co., capital \$25,000, inctpd. by W. V. Crockett, Oscar Gauthier and L. L. Scruggs.

Tex., Sherman—National Laundry, capital \$25,000, inctpd. by Frank Kote, C. H. Nall and A. A. Fielder.

Va., Danville—Danville Publishing Co. purchased entire plant equipment of the Times, Inc., Baltimore, Md.; will move all mch. to Danville and establish newspaper plant.

Va., Norfolk — Old Dominion Stevedoring Corp., capital \$20,000, inctpd. with Fred P. Gaskell, Prest., Millford, Conn., Wm. J. Garriss, Secy., Norfolk.

Va., Richmond—Publishing, etc.—James-town, Williamsburg and Yorktown Tours, Inc., capital \$50,000, chartered with Guy P. Murray, Prest. Newport News, Joseph F. Hall, Secy., Richmond.

Va., Richmond—Contracting—Smith Bros., Inc., chartered with J. H. Smith, Prest.; Rollen J. Windrow, Secy.-Treas.

W. Va., Athens—Athens-Princeton Transportation Co., capital \$25,000, inctpd. by J. R. Vermillion, H. E. GeJarnette and L. P. Hardy, all Bluefield, W. Va.

Miscellaneous Factories.

Ala., Birmingham — Dry Battery—E. C. Walsh, Jr. and C. G. Walsh, of D. G. Storage Battery Co. of Chicago, Ill., reported to establish plant to mfr. dry batteries.

Ala., Mobile—Gulf Paper Co., Inc., will vote on April 21 on increasing capital from \$12,000 to \$25,000.

Fla., Jacksonville—Southern Mattress Factory, inctpd. with A. Goldsmith, Prest.-Treas.; O. E. Manning, Secy.

Fla., Jacksonville—Naval Stores—Baker. Fentress & Co., of 208 S. La Salle St., Chicago, Ill., have purchased interest in Consolidated Naval Stores Co., a \$20,000,000 company and together with Gillican-Chipley interests of New Orleans, La., will develop 1,000,000 acres of long leaf yellow pine timber; timber will be handled so as to extract the maximum production of rosin, turpentine, lumber and by-products; after turpentine and rosin extracted the timber will be mfrd. into lumber, covering period of 15 yrs.

Fla., Lake Wales—J. H. Dean Naval Stores Co., Inc., capital \$75,000, chartered with J. H. Dean, Prest.; B. K. Bullard, Secy.-Treas.

Ga., Atlanta—Atlanta Glass Mfg. Co., will soon let contract for 2 units of glass bottle mfg. plant; capacity 4 cars daily. (Lately noted.)

Ky., Lexington—Dixie Ice Cream Co., capital \$200,000, inctpd. by John H. and Carl Kloecker, H. C. Kerr.

Ky., Maysville—Farmers' Union Creamery Association, 131 W. Third St., organized with E. L. Downing, Prest.; E. L. Harrison, Secy.; has purchased plant of Traxel Glascock Dairy & Ice Cream Co. and will improve and install Jensen mch. for mfr. butter and ice cream, output annually 1,000,000 lbs. butter and 60,000 gals. ice cream.

La., Myrtle Grove—Celeste Sugar Co. of New Orleans, La., capital \$300,000, filed mortgage of \$275,000 to cover bond issue; will cultivate 2000 acres in cane and the mfr. of sugar.

Md., Baltimore—Caplan-Rudolph Co., 425 E. Baltimore St., capital \$100,000, by Chas. S. and Daniel C. Caplan, Sol Rudolph.

Md., Baltimore—Tobacco—P. Lorillard Co., Barre and Charles St. will alter plant for tobacco plant; cost \$19,000.

Md., Baltimore—United States Cork Co., capital \$100,000, inctpd. by W. Howard Hamilton, Calvert Bldg., Norbert W. Dorsey, Wm. S. Hammond.

Md., Baltimore—Merchants Coffee Co., 104 S. Frederick St., inctpd. by Jesse Slignluff, L. Vernon Miller, Edwin F. A. Morgan.

Miss., Columbus—King Kotton Mfg. Co., inctpd. by A. A. Breast and others, has bldg. for mfr. of folded cotton back bands. (Lately noted.)

Miss., West—Co-Operative Creamery, J. G. Alexander, of Durant, Miss., Mgr., will rebuild plant burned at loss of \$12,000.

Mo., Kansas City—Strong-Bilt Garment Mfg. Co., capital \$15,000, inctpd. by C. W. Bartlett, S. F. Bartlett, F. M. Colburn.

Mo., Kansas City—Overalls, etc.—Motor Suit Mfg. Co., capital \$10,000, inctpd. by Lottie Goudehaux, F. J. Wolfson and others.

Mo., Kansas City—Columbia Ribbon & Carbon Mfg. Co., inctpd. by L. W. Dixon, A. B. Holmes, E. R. Mead.

Mo., St. Louis—Colonial Drug Co., capital \$10,000, inctpd. by G. A. Gantz, J. A. Winzen and others.

Mo., St. Louis—Cotton Thread, etc.—Western Thread Co., capital \$15,000, inctpd. by B. P. Hinman, Jr., J. A. Jameson, E. B. Bodley.

Mo., St. Louis—Nelson-Seigle Pants Co., capital \$10,000, inctpd. by Sidney elson, Lazarus Seigle, Joseph Seigle.

Mo., St. Louis—Baseballs—J. H. Grady Mfg. Co., has leased plant at 1308 N. Sixteenth St.; mfr. baseballs.

Mo., Sikeston—Ice Cream—Edward Heberer, of New Haven, Mo., interested in erection of plant at Front and Scott Sts.; 2 stories; brick; cost \$20,000.

N. C., Burlington—Faucette Bedding Co., inctpd. by J. A. and S. F. Faucette have leased building, will establish mattress plant.

N. C., Lenoir—Sauer Kraut—John B. Steele, County Farm Agt. and others interested in establishing sauer kraut factory.

Okla., Bristow—Quaker Drug Co., capital \$20,000, inctpd. by Dave and K. Elias Zackie.

Okla., Oklahoma City—Marshall & Harper Co., capital \$100,000, inctpd. by J. H. and Hathaway Harper, L. A. Buchanan.

Okla., Tulsa—Prest-O-Lite Co., 30 E. 42nd St., New York, has 8½ acre site and will erect plant.

Okla., Tulsa—Linde Air Products Co., 30 E. 42nd St., ew York, has site and will erect 150x200 ft. bldg. for producing air products.

S. C., Batesburg—The Summerland Creamery Co., capital \$25,000, inctpd. with S. B. Fishburne, Prest.; M. E. Rutland, Secy.-Treas.

S. C., Rockhill—Hughes Battery & Electric Co., capital \$10,000, inctpd. with L. B. Hughes, Prest.; M. I. Russell, V. P. and Secy.

Tenn., Chattanooga—Cosmetics—Charm-U-Co., capital \$10,000, inctpd. by W. L. Lawton, G. O. Sanders, O. W. Reeves.

Tenn., Knoxville—Benton Overall Mfg. Co., J. C. Benson, Prest., 723 N. Central Ave., increased capital from \$10,000 to \$50,000, changed name from Benton Overall Co.

Tenn., Knoxville—Mortar—P. and M. Mortar Co., capital \$100,000, inctpd. Luther C. Powers and W. M. McIntyre; establish plant to mfr. improved mortar.

Tenn., Memphis—Winkleman's Baking Co., H. T. Winkleman, Prest. let the following contracts for bakery to cost about \$250,000; E. J. Pearson, for general construction; Pritchard Bros. for plumbing; Fisher Heating Co. for heating; Fowler Electric Co. for electric contracts; Otis Elevator Co. for freight elevator; contracts for machinery and equipment will be let in about 60 days; J. Edwin Hopkins of McCormick Co., Pittsburgh and New York, Archts. (Lately noted.)

Tex., Dallas—Leather Goods, etc.—Porter Mfg. Co., Inc., chartered with R. C. Nemes, Prest. and Mgr.; J. B. Stiteler, V. P. and Treas.; J. I. Nemes, Secy.

Tex., San Antonio—Blue Bonnet Creamery, Inc., lately noted inctpd. with \$50,000 capital, organized with Bernard Brown, Prest.; E. H. Nichols, Secy.; has plans by Harvey L. Page, for erection of ice cream plant; 45x90 ft.; 2 stories and basement; fireproof.

Va., Chatham — Drugs — Chatham Mfg. Corp., capital \$20,000, with W. P. Parrish, Prest.; L. B. Whitehead, Secy.

Va., Norfolk — Products and Glass Mfg. Corp., capital \$250,000, inctpd. with F. L. Carter, Prest.; M. Glennan, Secy.

Va., Richmond—Rawleigh Drug Co., of Freeport, Ill. has acquired site at Fourth

and Hull Sts. and will erect plant for mfge. of drugs, etc.; 80x135 ft.; reinforced concrete and steel.

W. Va., Charleston—C. L. Robinson Ice & Cold Storage Corp.; interested in establishment of cider plant.

W. Va., Fairmont—MacEachen Co., capital \$3,000,000, incptd. by H. E. Grau, Fairmont, J. W. Devison, Grant Town, W. Va. and others.

W. Va., Worthington—Worthington Bottling Co., capital \$20,000, incptd. by T. M. and A. J. Tuerffs, G. C. Jackson.

Motor Cars, Garages, Tires, Etc.

Ala., Birmingham—Birmingham Auto Body Co., Inc., 2008 Avenue B, (lately noted incptd., capital \$10,000) organized with B. G. Lemoire, Prest.; T. A. Payne, Secy.-Treas.; has building for general auto body repairs, painting, etc.; (Continue existing business.)

Ala., Montgomery—Hugh Taylor Motor Co., capital \$10,000, incptd. by H. C. Taylor, T. C. Penton and J. J. Zorn.

D. C., Washington—Garage—Lansburgh & Bros. acquired site at 422 8th St., will erect 6 story garage, store house and upholstery workrooms.

Fla., Lake City—Lake City Motor Co., capital \$10,000, incptd. with C. C. Coffin, Prest.; L. L. Garbett, Secy.-Treas.

Fla., Miami—Royal Palm Auto Service, capital \$10,000, incptd. with Wilbert Clark, Prest.; Harriet Clark, Secy.-Treas.

Fla., Orlando—Christian-Wade Motor Co., capital \$25,000, incptd. with A. D. Wade, Prest.; J. M. Christian, Secy.-Treas.

Fla., Tampa—Hillsborough Tire Co., capital \$20,000 incptd. with R. L. Overton, Prest.; P. B. Overton, Secy.-Treas.

Fla., Tampa—Garage—Peninsular Motor Corp. will erect 2 story 105x106-ft. garage building, brick and steel construction, composition roof, tile floors, plate glass show windows, electric freight elevator, etc.; approx. cost \$40,000; M. Leo Elliott, Archt.

Fla., West Palm Beach—Oliver Motor Co., R. E. Oliver, Prest. has acquired site corner 3rd and Railroad Aves. will erect 1 story garage and sales station, concrete, fireproof construction; \$30,000; H. C. Daniels, Archt.

Ga., Savannah—Dimitt Buick Co., capital \$30,000, incptd. by L. H. Dimmitt, and others; changed name from Georgia Auto & Supply Co.

Ky., Beattyville—Beattyville Motor Co., incorporated by Lee Kash, W. L. and John P. Jones.

Ky., Hazard—Daniel Boone Motor Co., capital \$10,000, incptd. by C. E. Bullard, N. V. Linsey, L. H. Hubbard.

Ky., Whitesburg—Whitesburg Motor Co., capital \$10,000, incptd. by J. D., B. P. and Archie V. Sergeant.

La., Baton Rouge—Garage—Capital City Auto Co., will erect 2 story garage building corner of Main and Menard Sts., acquired 47-ft.-4-in. x 230 ft. site; plans include paint, battery, service and used car departments.

Md., Baltimore—M. M. T. Motor Co., Harford Ave. and Federal St., capital \$30,000, incptd. by Patrick F. Tracy, Raymond L. and Mary E. Maloney.

Md., Baltimore—Ever Ready Auto Top Corp., 104 W. Royal Ave., capital \$10,000, incptd. by Wm. Heinze, Merrill and Ebba A. Waide.

Md., Elkton—Dorpen Garage Co., incptd by Alfred J. Dorris, Walter Pennock and others.

Miss., Batesville—Panola Motor Co., incptd. by S. C. Bailey, W. W. Whitten, and others.

Mo., Nevada—Richardson Motor Co., capital \$10,000, incptd. by L. F. and Hazel Richardson, H. B. McDaniel.

Mo., Platte City—Platte City Motors, Inc., capital \$20,000, incptd. by J. G. and D. E. Johnston, W. E. Newman.

Mo., Poplar Bluff—Garage—Mrs. Carrie Bacon Turner will erect \$30,000 garage building on Poplar St.; Fay D. Bacon in charge of construction.

Mo., St. Louis—Commercial Truck Service Corp., incptd. by E. I. Phillips, C. D. Lehmann, E. L. Clark.

Mo., Sedalla—Garage—E. J. Brown & Son, will erect garage at Main St. and Monteau Ave.

N. C., Asheville—Asheville Tire Co., 33 E. College St. organized by A. J. Ray and others.

N. C., Kings Mountain—Mountain View Oil Co. will erect garage and car storage building.

N. C., Statesville—Pope Tire & Battery Co., Inc., 126 E. Broad St. (lately noted incptd., capital \$100,000) organized with L. O. Gibson, Prest.; W. L. Pope, Secy.-Treas. and Mgr., has building, install \$6000 tire building and curing mchy.; daily output 40 tires, etc.

Tenn., Nashville—Filling Station — Gulf Refining Co., will erect gasoline filling station on 3rd and Woodland Sts.

Tex., Mexia—Economy Filling Station, incorporated by T. F. and T. C. Morrow, Blake Smith.

Tex., Orange—J. G. Kearby Sales Corp., capital \$25,000, incptd. with T. F. Coyle, M. A. Watson, J. O. Sims.

Tex., San Antonio—Buick Motor Co. will erect 3 story garage building at corner Ave. C and 4th St., reinforced concrete and brick construction; plans by L. Harrington & Co.

Tex., San Antonio—Garage—J. M. Nix will erect garage on St. Mary's St., steel and reinforced concrete; Henry T. Phelps, Archt.

Tex., Waco—Lightfoot Auto Parts, capital \$20,000, incptd. by F. L. Lightfoot, L. F. and M. Naylor.

Va., Buchanan—Winston-Phelps Motor Co., Inc., capital \$50,000, chartered with R. A. Winston, Prest.; R. W. Phelps, Secy.

Va., Lexington—Lee Highway Filling Station, Inc., capital \$15,000, incptd. by E. P. Davis, Prest.; E. M. Shaw, Secy.

Va., Richmond—Garage—L. E. Wetzel, 2209 Hancock St., let contract to J. A. Sweeney, 3300 Garland Ave. to erect 6 garages; 1 story, foundation brick, tile roof, concrete floors.

W. Va., Bluefield—System Motor Co., organized by W. L. Mustard, Sam M. Lambert and others.

Railways.

Ala., Anniston—Inquiry in official quarters of the Southern Railway Co. failed to confirm the recent press report that a contract had been awarded to the Goodrich Construction Co. to build 20 mi. of roadbed between Woodstock and Centerville, Ala.

Road and Street Construction.

Ala., Birmingham—Jefferson County, Board of Revenue, let contract for paving 14½ mi. Roebuck-Chalkville road as follows: To Southern Roads Co., Birmingham, at \$101,230, for first 5 mi.; Emulsified Asphalt Co., at \$62,540, for next 5 mi., and Sam E. Finley, Atlanta, at \$54,720 for 4½ mi. to St. Clair County line. (Lately noted.)

Ala., Birmingham—City Commrs. let contracts at \$35,546, to improve 7 streets.

Ala., Carrollton — State Highway Dept.,

Montgomery, Ala., let contract to W. W. Thompson, to grade, drain and gravel surface 23.6 mi. road from Tuscaloosa County line to Carrollton; and to Ed. Pettus, to build bridges, total cost \$373,667.71, Pickens County, F. A. Proj. 127. (Lately noted.)

Ala., Cloverdale—For proposal details see Mchy. Wanted—Paving.

Fla., Bartow—Polk County Commrs., have tentative plans for building 160 mi. road including the following 18 roads: 1¼ mi. road from Mulberry-Plant City road to Hillsborough County line; 6 mi. from Chicora or Brewster to Hillsborough County line; 24 mi. from Lake Auburndale north to Lake County line; 5 mi. from point on Lake Alfred-Auburndale road to point on Auburndale-Groveland road; 6 mi. from Florence Villa to Auburndale; 3 mi. from point on Bartow-Lake Wales road, to connect with Winter Haven-Eloise road; 16 mi. from Bartow-Lake Wales road to Fort Meade-Frostproof road, through Alturas; 3 mi. from Alturas north to Bartow-Lake Wales road; 13 mi. from Fort Meade and Frostproof road to road from Frostproof south, through Berea; 7 mi. from Frostproof south to Highlands County line east of Lake Livingston; 2 mi. from Frostproof to Y. M. C. A. camp; 17 mi. from Starr Lake to Crooked Lake, through Templeton-Hesperides, Mammoth Groves, etc.; 6 mi. from Lake Wales to Hesperides; 2½ mi. from Loughman along Osceola County line; 9 mi. from Loughman west to Deansville; 6½ mi. from Brewster or Chicora south to Hardee County line; 2½ mi. around west shore of Lake Arianna, connecting Auburndale-Groveland road with Auburndale-Lakeland road; contemplate voting on \$3,000,000 bonds.

Fla., DeLand—E. W. Brown, Director, Dept. of Genl. Welfare, plans following improvements; pave streets, install sewer system and disposal plant, and water system and plant; voted bonds. (Lately noted.)

Fla., De Land—For proposal details see Mchy. Wanted—Road Construction.

Fla., Jacksonville—Duval County Commrs. plans building 5 roads as follows: St. Augustine Road No. 1—19.968 mi. from corporate limits of South Jacksonville to St. Johns County line; King's Road No. 3—10.254 mi. from end of present penetration pavement to Nassau County line; Orange Park Road No. 5—7.756 mi. from city limits of Jacksonville to Clay County line; Edgewood Ave. No. 12—7.75 mi. from Lackawanna Ave. No. 10, to State Road No. 1; Monerief Road No. 9—5.521 mi. from city limits of Jacksonville to Kings Road No. 3. (Lately noted voted bonds.)

Fla., Jacksonville—J. M. Johnson, Jacksonville, was awarded contract at \$7147, to lay rock on 1.93 mi. San Jose Blvd., from end of present hard surfaced road, connecting with St. Augustine road.

Fla., Madison—Madison County Commrs. will improve 4 roads. For proposal details see Mchy. Wanted—Road Construction.

Fla., Miami—For full details see Water Works.

Fla., St. Augustine — St. Johns County Commrs., plan building 6 roads as follows: 8.4 mi. Elkton-Tocoi; 14 mi. Tocoi road, from Tocoi to St. Augustine; 3 mi. Spud; 6.25 mi. from Hastings to Putnam County line; 2.5 mi. extend Hastings Blvd. to Flagler County line; road to and through Sampson; will vote Apr. 24 on \$500,000.

Fla., Sanford—For proposal details see Mchy. Wanted—Paving.

Fla., Tampa — For proposal details see Mchy. Wanted—Road Construction.

Georgia — State Highway Dept., Atlanta, Ga., plans building 53 roads and appropriated

funds as follows: Floyd County, Rome-Cartersville road, \$30,000; Fannin County, Blue Ridge-Tennessee State line road, \$20,000; Haralson County, Buchanan-Carrollton road, \$32,000; Cherokee County, Canton-Jasper road, \$10,000; Haralson County, Tallapoosa-Alabama State line road, \$48,613.20; Rabun County, Clayton-Tallulah River road, \$20,000; Hall County, Gainesville-Jefferson road, \$26,000; Franklin County, Carnesville-Commerce road, \$15,000; Stephens County, Cornelia-Toccoa road, \$20,000; Habersham County, Demorest-Clarksville road, \$15,000.

White County, Cleveland-Blairsville road, \$18,293.37; Fayette County, Fayetteville-Sharpsburg road, \$21,000; Carroll County, Carrollton-Bremen road, \$50,000; Meriwether County, Harris City-Warm Springs road, \$25,000; Troup County, hard surface LaGrange-West Point road, \$50,000; Butte County, Jackson-Griffin road, \$35,000; Oconee County, Watkinsville-Madison road, \$9,200; Elbert County, Elberton-Washington road, \$20,000; Jasper County, Monticello-Gray road, \$15,000; Hart County, Royston-Hartwell road, \$6500.

Newton County, Covington-Monticello road, \$17,500; Green County, Greensboro-Watkinsville road, \$19,000; Madison County, Danielsville-Comer road, \$18,000; Jefferson County, Wrens-Richmond County line road, \$20,000; Hancock County, Sparta-Washington County line road, \$20,000; Richmond County, 17 mi. south of Augusta to Jefferson County line, \$40,000; Taliaferro County, Crawfordville-Warren County line road, \$15,000; Wilkes County, Tignall-Elberton road, \$20,000; Baldwin County, Milledgeville-Sandersville road, \$15,000; Columbia County, Appling-Lincoln County line road, \$25,000.

Terrell County, Dawson-Parrott road, \$29,000; Randolph County, Cuthbert-Dawson road, \$29,000; Sumter County, Americus-Ellaville road, surface old project, \$27,802.16; Wheeler County, Glenwood-Lumber City road, \$12,500; Telfair County, McRae-Milan road, \$15,000; Dodge County, Rhine-Milan road, \$13,750; Twiggs County, Macon-Jeffersonville road, \$10,000; Dooley County, Pinehurst-Unadilla road, \$13,500; Bibb County, Macon-Jeffersonville road and for other purposes, \$85,000; Bulloch County, Statesboro-Savannah road, \$55,000.

Toombs County, Vidalia-Lyons road, \$20,000; Tattnall County, Reidsville-Collins road, \$17,000; Jenkins County, Millen-Screven County line road, \$20,000.

Bryan County, Bulloch County line to Jenks Bridge, \$20,000; Dougherty County, Albany-Camilla road, \$50,000; Dougherty County, other road projects, \$50,000; Colquitt County, Moultrie-Camilla road, \$15,000; Echols County, surface old project between Valdosta and Florida State line, \$8000; Lowndes County, Valdosta-Cooke County line road, \$70,000; Brooks County, Quitman-Thomas County line road, \$96,000; Ware County, Waycross-Ruskin road, \$35,000; Ware County, Waycross-Atkinson County line road, \$45,000; Pearce County, Offerman-Patterson road, \$10,000; Counties to furnish equal amount.

Ga., Dawson—City plans paving $\frac{3}{4}$ mi. of Lee St. from Stonewall to Seaboard Air Line Ry. crossing. Address The Mayor.

Ky., Ashland—For proposal details see Mch. Wanted—Paving and Sewer Construction.

Ky., Ashland—Brewer & Brewer Co., Chillicothe, Ohio, was awarded contract at \$25,000, to build $1\frac{1}{2}$ mi. Bellefonte road from Russell road to Country Club.

Ky., Ashland—Mayor W. M. Salisbury, let contract to Hunt-Forbes Construction Co.,

Ashland, at \$110,000 for paving in Park Hill Addition; 8433 sq. yds., brick on concrete base; 19,977 sq. yds. bituminous on pit-run slag base; will receive bids until Apr. 2 to pave Grayson road addition, \$100,000.

Ky., Ashland—Means Realty Co., will let contract at \$10,000 to pave, and install water and sewer systems, in Nicholas Place; Fred W. Gesling, Engr.

Ky., Barbourville—For full details see Land Developments.

Ky., Booneville—Owsley County plans completing county's part of Kentenva highway; voted \$75,000 bonds. Address County Commrs.

Ky., Harlan—For proposal details see Mch. Wanted—Paving.

Ky., Louisa—State Highway Comsn., Frankfort, Ky., will receive bids until Apr. 4 for 8.5 mi. on Mayo Trail from Louisa to Paintsville.

Ky., Paducah—F. W. Katterjohn, Mayor, plans expending \$30,000 for street improvements.

Louisiana—Louisiana Highway Comsn., will build 2 sections of roads. For proposal details see Mch. Wanted—Road Construction.

La., Alexandria—For proposal details see Mch. Wanted—Paving.

La., Cedar Grove—City Clk., will receive bids until Apr. 9 for paving certain streets, including Atkins, Fairfield, 70th, Southern and Division.

Maryland—State Roads Comsn., will build 7 roads. For proposal details see Mch. Wanted—Road Construction.

Md., Baltimore—For proposal details see Mch. Wanted—Paving.

Md., Frederick—For proposal details see Mch. Wanted—Road Construction.

Md., Mount Victoria—For full details see Land Developments.

Md., Towson—Baltimore County Commrs., John R. Haut, Ch. Clk., receives bids until March 29, to improve .5 mi. Middle River Road, from Philadelphia Road to end of macadam in 15th Dist.; Samuel A. Green, Roads and Sanitary Engr.

Miss., Belzoni—For full details see Water Works.

Miss., Shaw—For proposal details see Mch. Wanted—Paving.

Miss., Starkville—For proposal details see Mch. Wanted—Road Construction.

Miss., Vicksburg—For proposal details see Mch. Wanted—Paving.

Miss., Waynesboro—Waynesboro Separate Road Dist. Commrs., will receive bids until Apr. 3 to build 2/3 mi. gravel road in town.

Mo., Chillicothe—City plans expending \$8000 to pave 3 blocks on Walnut St. with brick; Jo. Braddus, Engr. (Lately noted.)

Mo., Kennett—City will let contract soon to pave sections of Harrison and Jackson Sts. Address The Mayor.

Mo., St. Charles—For proposal details see Mch. Wanted—Road Construction.

Mo., Trenton—City will receive bids to widen Mable St. to 32 ft. Address The Mayor.

Mo., Troy—For proposal details see Mch. Wanted—Road Construction.

Mo., University City—For full details see Land Developments.

North Carolina—State Highway Comsn., Raleigh, will build 23 roads. For proposal details see Mch. Wanted—Road Construction.

North Carolina—State Highway Comsn., Frank Page, Chmn., Raleigh, N. C., authorized 41 road projects as follows: 149, Hertford County, 14 mi. from Murfreesboro to Virginia

State line, Route No. 485; 222, Duplin County, 10 mi. from Duplin County-Pender County line toward Kenansville, Route No. 40; 214, Craven County, 9.9 mi. from end of Proj. No. 221 to Carteret County line, hard surface, Route No. 10; 292, Wilson County, 11.4 mi. from Wilson to Nash County line, Route No. 91; 353, New Hanover County, 8 mi. hard surface from Wilmington to Wrightsville Sound, Route No. 20; 318, Brunswick County, 8.2 mi. hard surface from Southport west toward Supply, Route No. 201; 330, Columbus County, 11.2 mi. from Whiteville to Lake Waccamaw H. S., Route No. 20; 382, Pender County, 5.6 mi. sand asphalt, from end of Proj. No. 379, to Onslow County line, Route No. 30; 366, Onslow County, 18.5 mi. sand asphalt from Pender County line to Jacksonville, Route No. 30; 449, Lee County, 6.5 mi. penetration macadam from Sanford to Chatham County line, Routes No. 50 and 53; 489, Wake County, 2.5 mi. from Hepsibah Church to Johnston County line, Route No. 91.

541, Guilford County, 4 mi. penetration macadam from Greensboro toward Julian, Route No. 60; 522, Davidson County, 2 mi. hard surface from Lexington to Erlangers Mills, Route No. 64; 523, Davidson County, 13.3 mi. from end of Proj. No. 522 to Forsyth County line, Route No. 64; 507, Alamance County, 4 mi. penetration macadam from Graham to Belmont, Route No. 62; 571, Moore County, 5 mi. paving from Southern Pines to Aberdeen, Route No. 50; 568, Moore County, 11 mi. hard surface from Carthage to Pinehurst, Route No. 702; 557, Montgomery County, 3 mi. hard surface from eastern limits of Troy toward Wadesville, Route No. 74; 556, Montgomery County, 7.11 mi. penetration macadam from Richmond County line to Mt. Gilead, Route No. 51; 592, Rockingham County, 8.2 mi. hard surface, from Guilford County line to Reidsville, Route No. 70; 660, Mecklenburg County, 10.4 mi. hard surface from Charlotte to Gaston County line, Route No. 27.

697, Union County, 15 mi. hard surface from end of pavement near Munroe to Anson County line, Route No. 20; 671, Anson County, 7 mi. from Polkton to Union County line, Route No. 20; 666, Richmond County, 4 mi. from Hamlet to Scotland County line, Route No. 20; 763, Surry County, 8 mi. hard surface from Mt. Airy to Pilot Mountain. Route No. 66; 721, Caldwell County, 13.2 mi. from Lenoir to Wilkes County line, Route No. 18; 750B, Stokes County, 8 mi. from Big Creek to Danbury, Route 89; 791, Yadkin County, 10 mi. from Yadkinville to Forsyth County line, Route No. 60; 732, Davie County, 7 mi. from end of Proj. No. 731 to Forsyth County line, Route No. 65; 745, Forsyth County, 5 mi. from Winston-Salem to Davidson County line, Route No. 64, 780B, Wilkes County, 10 mi. from foot of mountain to Mulberry Gap, Route No. 67.

753, Stokes County, 9 mi. from Forsyth County line to Danbury, Route No. 89; 720, Caldwell County, 16.2 mi. from Lenoir to Catawba County line, Route No. 17; 786, Wilkes County, 5 mi. hard surface from Wilkesboro east toward Yadkinville, Route No. 60; 837, Henderson County, 9 mi. resurfacing from Hendersonville to Tuxedo, Route No. 29; 824, Cleveland County, 9.5 mi. from Shelby to Rutherford County line, Route No. 20; 867, 14 mi. from Columbus to Rutherford County line, Route No. 19; 873, Rutherford County, 8.7 mi. from Columbus County line to Rutherfordton, Route No. 19; 874, Rutherford County, 14.5 mi. from Rutherfordton to Cleveland County line, Route No. 20; 892, Yancey County, 20 mi. from Tennessee line toward Cane River, P. O., Route No.

692; 974, Madison County, 9 mi. from Hot Springs to Haywood County line, Route No. 209.

N. C., Camden—State Highway Comsn., Raleigh, N. C., is reported to let contract soon to hard surface road from South Mills to Virginia State line, through Dismal Swamp.

N. C., Durham—For proposal details see Mchy. Wanted—Road Construction.

N. C., Enfield—A. N. Andleton, Mayor, let contract to Robt. G. Lassiter & Co., Raleigh, N. C., at \$135,000 to pave about 2 mi. of streets. (Lately noted.)

N. C., Granite Falls—Town Commrs. plan laying 2½ mi. cement sidewalks.

N. C., Greensboro—Claude Kiser, Mayor, let contract to I. F. Grantham & Co., at \$1.64 sq. yd. to lay sidewalks on N. Elm St. from Church to Price Sts.; also to Murray Construction Co., Knoxville, Tenn., at \$577,455 to pave 100,000 sq. yds. asphalt paving in various parts of city, on 39,000 sq. yds. asphalt paving on Walker Ave., and on 30,000 sq. yds. of concrete paving; Geo. Finck, Highways Engr. (Lately noted.)

N. C., Leaksville—For proposal details see Mchy. Wanted—Paving and Sewer Construction.

N. C., Lenoir—For proposal details see Mchy. Wanted—Road Construction.

N. C., Newton—For proposal details see Mchy. Wanted—Paving and Sewer Construction.

N. C., Troy—For proposal details see Mchy. Wanted—Road and Bridge Construction.

Oklahoma—State Highway Dept., Oklahoma City, let contracts to build 8 road projects as follows: 15, Washington County, 6.1114 mi. 2-in. willite surface on 3-in. willite base, to Hamilton Construction Co., Bartlesville, Okla., at \$210,031.89; 68, Johnston County, 14.870 mi. gravel road, to Garrett & Mills Co., Oklahoma City, at \$99,602.69, and for bridges to General Construction Co., St. Louis, at \$74,227; 67, Johnston County, 4.052 mi. gravel road, to Madill Construction Co., Madill, Okla., at \$44,184.60; 69, Pittsburg County, 7.419 mi. 2-in. willite surface on 3-in. willite base, to Western Paving Co., Oklahoma City, at \$243,397.26; 80, Pittsburg County, 5.663 mi. 2-in. willite surface, on 3-in. willite base, to Western Paving Co., at \$177,680.69; 81, Pittsburg County, 3.839 mi. Bates type concrete pavement, to Green Construction Co., Oklahoma City, at \$126,252.54; 88, Creek County, 1.65 mi. 2-in. willite surface on 3-in. willite base, to A. O. Bowers, Oklahoma City, at \$50,921.03; 89, Carter County, 2.925 mi. 1½-in. willite surface on 3½-in. willite base to General Construction Co., St. Louis, Mo., at \$80,266.52.

Okla., Drumright—Creek County, Tiger Township, plans improving roads; votes \$300,000 bonds. Address County Commrs.

Okla., Ponca City—City Commrs. will receive bids to pave S. 4th St. and N. 7th St.

Okla., Tulsa—For full details see Land Developments.

S. C., Easley—For proposal details see Mchy. Wanted—Paving.

S. C., Edgefield—Town plans paving Main St. from depot to public square, and other streets. Will vote May 2, on \$30,000 bonds. Address The Mayor.

Tenn., Dyersburg—Dyer County Pike Commission, will build 17 sections of roads. For proposal details see Mchy. Wanted—Road Construction.

Tex., Bellville—Austin County, Wallis Precinct plans building 9 mi. concrete road on S. H. No. 36, through Wallis, and also graveling 2 mi. East Bernard road; state and federal aid to furnish \$50,000; also plans pur-

chasing San Antonio and Aransas Pass Ry. bridge over Brazos River, \$20,000; voted \$100,000 bonds. Address County Commrs.

Tex., Carthage—Panola County Commrs Court, Road Dist. No. 3, A. D. Nelson, County Judge, plans building S. H. No. 8, between Carthage and Rusk County line; \$63,000 bond issue available.

Tex., Cleburne—Johnson County, O. B. McPherson, County Judge, plans improving highways; will vote Apr. 14 on \$40,000 bonds; G. W. Courter, County Engr.

Tex., Corpus Christi—Nueces County Commissioners Court, F. A. Tompkins, County Auditor, let contract for 2 sections of roads, to Smith Brothers, Dallas, Tex., as follows: at \$112,922.52 for 10.97 mi. on S. H. No. 12, and at \$127,145.14 for 11.71 mi. on S. H. No. 12. (Lately noted.)

Tex., Corsicana—For proposal details see Mchy. Wanted—Road Construction.

Tex., Dallas—City Comsn., plans widening to 70 ft. Bryan St., from Pacific Ave. to Pearl St.; E. A. Wood, City Plan Engr.

Tex., Georgetown—City, plans additional mile of street paving. Address The Mayor.

Tex., Henrietta—Clay County, J. F. Vaden, County Judge, will build 35 mi. concrete pavement on S. H. Nos. 2 and 5; voted \$575,000 bonds. (Lately noted.)

Tex., Hondo—Medina County, R. J. Noonan, County Judge, will receive bids soon for 7.58 mi. bituminous macadam road on S. H. No. 3; \$118,000; Walton & Arneson, County Engrs., Gunter Bldg., San Antonio, Tex.

Tex., Waco—Ben C. Richards, Mayor, will receive bids until March 31 to pave 5 blocks on S. 11th St. from Austin to Clay Aves.; also plans grading and graveling Bagby St. from 15th to Robinsonville road.

Tex., Waco—Mayor Ben C. Richards, will receive bids until March 30, to pave 9 blocks of Elm St. from Peach St. to Dallas road; 4 blocks on N. 18th St. from Herring to Alexander, and 4 blocks on Speight from 12th to 16th.

Virginia—State Highway Comsn., H. G. Shirley, Chmn., Richmond, Va., let contracts for 5 road projects as follows: F-157, Route 9, 4.3 mi. concrete, from Toano to Drasclnd Creek, to H. H. George Jr. & Son, Richmond, at \$177,657; F-160, B and C. Route 5-9.4 mi. concrete, between Carrsville and Suffolk, Nansemond County, to Royer-Ferguson Co., High Point, N. C., at \$343,274; S-209, Route 19-6.5 top soil, from Columbia to Fife, Fluvana and Goochland Counties, to Burgess & Atkinson, Scottsville, Va., at \$70,578; 271-B, Route 11, 5.8 mi. surface treated macadam, from Claypool Hill to Rosedale, Tazewell and Russell Counties, to W. P. Midkiff, Ivanhoe, Va., at \$218,610; S-265, Route 11-X-5.5 mi. bituminous macadam, between Grundy and Hanger, Buchanan County, to Starkweather Contracting Corp., Crozet, Va., at \$217,130; also received low bids on 3 road projects as follows: S-214, Route 2, 6.6 mi. top soil, from Coopers Store to Fork Union, Fluvana County, C. H. Oliver, Dozewell, Va., at \$30,052; S-155, Route 2-1.5 mi. top soil, from Cunningham Creek to Coopers Store, Fluvana County, Perkins and Barnes, Blackstone, Va., at \$14,138; S-287, Route 11-4.9 mi. bituminous macadam, between Dickenson County line and Dooley, Wise County, Scott & Trinkle, Norton, Va., \$265,655. (Lately noted.)

Va., Charlottesville—Albemarle County, Board of Supvrs., let contract to John T. McKinney, Lynchburg, Va., at \$63,000, to build Monticello Road, through Blue Ridge Sanatorium property, and Rawlings estate; R. E. Leo, County Supt. of roads.

Va., Norton—Town plans building concrete road from Norton Hardware Co.'s plant to

Spout Springs; Wise County, Board of Supvrs. granted \$7500 aid.

Va., Roanoke—For full details see Land Developments.

W. Va., Clarksburg—D. H. Hamrick, City Clk., let contract to W. F. Allen Co., at \$53,685.50 to pave W. Main St. from 5th St. to Angle Inn; to Thoney Pietro, at \$5558.50 to pave Traders Ave. from 3rd to 4th, and at \$10,211.50 from Sehon to Chestnut. (Lately noted.)

W. Va., Dunbar—For proposal details see Mchy. Wanted—Paving.

W. Va., Fairmont—Marion County, Winfield Dist., plans improving 4 sections of roads as follows: 3 mi. from Winfield road to Piney Pike; 1 mi. Hoult road; 1.5 mi. Montana road; 1.4 mi. Catawba road.

W. Va., Fairmont—Marion County, Winfield Dist., plans building Morgantown pike between Fairmont and Morgantown, through district; voted \$200,000 bonds; Frank J. Wilfong, County Road Engr. (Lately noted.)

W. Va., Huntington—For proposal details see Mchy. Wanted—Paving.

W. Va., Wheeling—Ohio County Commrs., H. C. Underwood, Clk., let contract to Ben H. Stringer Co., to build 6100 ft. concrete road from Pogue's Run to top of Dean's Hill. (Lately noted.)

Sewer Construction.

Ala., Birmingham—City Comsn. let contract at \$18,931.95 to Thomas & Negley, for construction of sanitary sewer at North Birmingham.

Fla., Cocoa—For full details see Water Works.

Fla., DeLand—For full details see Road and Street Construction.

Fla., Miami—For full details see Water Works.

Ga., Donalsonville—City will vote April 17 on \$32,000 bonds for sewerage system and \$18,000 for improving, enlarging and extending electric light and water plant. T. E. Roberts, Mayor.

Ky., Ashland—For full details see Road and Street Construction.

Ky., Barbourville—For full details see Land Development.

Ky., Hazard—For proposal details see Mchy. Wanted—Sanitary Sewer System.

Ky., Paducah—City, Henry A. Pulliam, Commr. of Works, will soon begin construction of sewer lateral system.

La., Alexandria—For proposal details see Mchy. Wanted—Storm Sewer.

Md., Mount Victoria—For full details see Land Developments.

Miss., Beauvoir—For proposal details see Mchy. Wanted—Sewer Construction.

Mo., Carrollton—City will vote on \$95,000 bonds for completion of sewer system. Address The Mayor.

Mo., Lathrop—For full details see Water Works.

Mo., University City—For full details see Land Developments.

N. C., Davidson—For proposal details see Mchy. Wanted—Water Works and Sewers.

N. C., Greensboro—City let contract to Murray Construction Co. for the following sewer work; at \$3904.25 for Contract No. 3, at \$5826 for Contract No. 4, at \$453,500 for Contract No. 5.

N. C., Leaksville—For proposal details see Mchy. Wanted—Paving and Sewer Construction.

N. C., Newton—For proposal details see Mchy. Wanted—Paving and Sewer Construction.

Okla., Fort Gibson—City will vote April 3 on \$45,000 bonds. Address The Mayor.

S. C., Greenville—City, W. D. Nevés, City Engr. let contract at \$19,442.50 to Henry Construction Co. for sewer construction. (Lately noted.)

Tex., Fort Worth—City will soon call for bids for construction of Henderson St. storm sewer between North and Texas Sts.; will also construct sewer on South Side, East and West Rosedale Sts. and De Zavala St.; \$800,000 available. Address The Mayor.

Va., Roanoke—For full details see Land Developments.

Telephone Systems.

Ala., Birmingham—Southern Bell Telephone & Telegraph Co., main office 61½ N. Forsyth St., Atlanta, Ga., reported to expend \$5,000,000 on improvements in state of Alabama during next 5 years; approx. \$1,000,000 will be spent during 1923; T. B. Baird, Dist. Mgr.

Ky., Spring Lick—Spring Lick & Caneyville Telephone Co., incptd. by C. W. Wilkins, J. H. Wortham and A. M. Ingram.

La., New Orleans—Western Union Telegraph Co., W. W. Carlton, Prest. has acquired building at Carondelet and Perdido Sts., will remodel.

W. Va., Charleston—Chesapeake & Potomac Telephone Co. of West Virginia, increased capital from \$7,500,000 to \$12,000,000.

Textile Mills.

Ala., Tuscaloosa—Hosiery—W. B. Davis & Sons, will begin construction of hosiery mill about April 15.

Ga., Augusta—Sibley Mfg. Co. is rearranging opening room and installing new mchy.; J. E. Sirrine & Co., Engrs., Greenville, S. C.

Ga., Rome—Anchor Duck Mills, retained E. S. Draper, Landscape Archt. and City Planner, 11 E. 5th St., Charlotte, N. C., to make surveys of village to include location of new houses.

Ga., Rossville—Peerless Woolen Mills, J. L. Hutcheson, Prest. let contract at about \$75,000 to T. S. Moudy & Co., Chattanooga, Tenn. to construct addition to mill; will increase capacity about 50 per cent. (Previously noted.)

N. C., Lenoir—Nelson Cotton Mills let contract to Elliott Building Co. of Hickory, N. C. to construct cotton mill together with warehouse, reservoir and 16 cottages; mill will be 80x375 ft.; cost of all buildings \$125,000.

N. C., Marshville—Marshville Mfg. Co., S. M. Robinson, Prest.; A. M. Stack, 3rd, Secy.-Treas.-Mgr.; will establish plant for mfrg. tire cord fabric; 6000 lbs. daily capacity; 120x130 ft.; will install 2800 twister spindles; electric power plant; 200 H. P.; cost of mchy. \$48,000; contract for equipment let to Saco-Lowell Mch. Co., Rogers W. Davis, Southern Representative, Charlotte, N. C. (Lately noted.)

N. C., Newton—Ridgeview Hosiery Mill Co., G. A. Worlick, Prest., increased capital from \$100,000 to \$250,000.

S. C., Chester—Baldwin Cotton Mill, will build new opener room and install new opening mchy.; J. E. Sirrine & Co., Engrs., Greenville, S. C.

S. C., Gaffney—Alma Mills, W. C. Hamrick, Prest. will erect shade cloth mfr. plant; 105x228 ft.; brick and wood; cost \$150,000; will install 15,000 spindles; 400 looms; electric power plant; 500 H. P.; cost of mchy. \$300,000; J. E. Sirrine & Co., Engr., Greenville, S. C. (Lately noted.)

S. C., Greenville—Marion Cotton Mills,

capital \$10,000, incptd. with L. W. Dickerson, Prest. and Treas.; I. S. Rainwater, V.-P. and Secy.

S. C., Greenwood—Grendel Mills, will extend present mill, rearrange mchy. and install 11,000 spindles and necessary preparatory machinery; J. E. Sirrine & Co., Engrs., Greenville, S. C. (Lately noted.)

S. C., Spartanburg—Arcadia Mills Co., H. A. Ligon, Jr., V. P., let contract for engineering work on new plant to Lockwood, Greene & Co., of Boston; mill will be of steel and concrete; will install 10,000 spindles and 400 looms; cost about \$500,000. (Lately noted.)

S. C., Taylors—Southern Bleachery, Harry Stevenson, Prest. retained E. S. Draper, Landscape Archt. and City Planner, 11 E. 5th St., Charlotte, N. C. to plan and lay out village development.

Tenn., Chattanooga—Magnolia Silk Mills, T. Walter Fred, Prest. let contract to Hahn Construction Co. for construction of plant on Lindsay St.; one story; brick; 50x200 ft.; initial capacity of 1000 lbs. thread per week; cost \$20,000, exclusive of mchy.; Gordon Smith, Archt.

Tex., Dallas—Dallas Textile Mills Co., J. Perry Burrus, Prest., Geo. N. Aldredge, Secy., capital \$1,000,000, will open bids about May 1 for construction of 250,000 cotton mill; install 12,000 spindles; internal combustion gas power plant, cost \$75,000; electric drive; approx. cost of mill mchy. \$500,000; L. M. Roberts, Archt.-Engr., Atlanta, Ga. (Lately noted. (See Mchy. Wanted—Textile Plant.)

Water Works.

Ala., Attala—City Council authorized extension of water main on Fourth St.

Fla., Cocoa—City, C. R. Copeland, Mayor, will let water works and sewer franchise for 2000 population.

Fla., DeLand—For full details see Road and Street Construction.

Fla., Miami—City voted \$2,730,000 bonds for the following improvements: water supply, \$750,000; public parks, \$1,000,000; street railways, \$400,000; city hospital \$100,000; comfort station \$15,000; sanitary sewers, \$100,000; storm sewers, \$75,000; channell, \$100,000; fire alarm extension and hydrant and high pressure system \$75,000; purchased of property for widening streets, \$75,000; incinerator unit, \$35,000. Frank H. Wharton, City Mgr. (Lately noted.)

Ga., Donalsonville—For full details see Sewer Construction.

Ky., Ashland—For full details see Road and Street Construction.

Ky., Barbourville—For full details see Land Developments.

La., Plaquemine—For proposal details see Mchy. Wanted—Water Works and Electric Light Plant.

Md., Baltimore—Board of Awards let contract at \$1,070,000 to Carozza-Rowe Construction Co., Gilmor St. near Edmondson Ave., for construction of filter beds at the Montebello plant with capacity of 96,000,000 gals. per day. (Lately noted.)

Miss., Belzoni—City will vote in April on \$125,000 bonds for rebuilding water and light plant and paving streets. Address The Mayor.

Miss., West Point—City will let contract soon for two 450 H. P. boilers to be installed at water and light plant. Address The Mayor.

Mo., Lathrop—City voted \$60,000 water works bonds, \$22,000 sewer bonds. Address The Mayor. (Lately noted.)

N. C., Davidson—For proposal details see Mchy. Wanted—Water Works and Sewers.

N. C., North Wilkesboro—Board of Comms let contract to Electrical Construction Co., Charlotte, for extension of water mains on Elizabeth, Trogon and Hinshay Sts., Kensington Heights; cost about \$15,000. (Lately noted.)

Okla., Poteau—City let contract to J. S. Terry of Poteau, to construct reservoir and make extensions to water mains; \$45,000 bonds available.

S. C., Mullins—W. D. Jenerette, Chrmn., Board of Public Works, will construct additional well, approx. 200 gals. per min.; cost from \$6000 to \$10,000; G. M. Brown, City Engr., Mullins. (Lately noted.)

Tex., Howe—City defeated bond issue. Address The Mayor. (Lately noted.)

Tex., Perryton—City will expend \$110,000 in extension of present plant and construction of new; 300 H. P.; install 150 H. P. oil engine, cost approx. \$14,000; 75,000 gals. capacity tank, cost \$7000; cost of building \$6000; Gant-Baker, Const. Engr., Oklahoma City, Okla. (Lately noted.)

Va., Norfolk—City, C. M. Ashburner, Mgr., will construct 8-in. water main to Norview school; cost \$9300.

Va., Roanoke—For full details see Land Developments.

Woodworking Plants.

Ala., Montgomery—American Panel & Veneer Corp., capital \$10,000, chartered by Frank L. Zang, Isaac Gerstley and Leon C. Sustein.

Fla., Kissimmee—Woodtex Co., Inc., capital \$100,000, chartered with Pat Johnston, Prest.; Irma Holzman, Secy.-Treas.

Fla., Miami—Flamingo Furniture Co., capital \$10,000, incptd. with Wm. I. Phillips, Prest.-Treas.; R. W. Reynolds, Secy.

Ga., Rome—Caskets—Glover Mfg. Co., capital \$10,000, incptd. by Jule M. Glover, J. N. White and J. D. Hanks.

Miss., Canton—R. C. Jones Lumber & Stave Co., capital \$20,000, incptd. by J. F. Jones, L. G. Sprlvey and others.

Mo., St. Louis—Millwork—Carr-Trombley Mfg. Co., 2nd and French St. will erect 4 story, 145x220-ft. addition, increasing total floor space to approx. 200,000 sq. ft.; entire plant will have frontage of 360 ft.; estimated cost \$250,000.

N. C., Greensboro—Robertson Furniture Co., capital \$50,000, incptd. by C. J. Tinsley, Greensboro; C. T. and R. D. Robertson, Guilford College, N. C.

N. C., High Point—Carolina Piano Mfg. Co., Inc., 1313 English St. (lately noted incptd., capital \$100,000) organized with W. H. Manning, Prest., Bethel, N. C.; Geo. D. Manning, Secy., High Point; has leased building for mfr. of pianos, phonographs and piano benches; install tenoner machine. (See Mchy. Wanted—Tenoner.)

N. C., Lexington—Elk Furniture Co. will rebuild plant, burned at loss of \$70,000.

N. C., North Wilkesboro—Forest Furniture Co. will erect 3 story addition to plant; increased capital to \$100,000.

S. C., Pamplico—Crates, etc.—L. W. Coker, plans establishing plant for mfr. of crates, boxes, etc.; will install veneer machines, electric motors, sawmills, etc. (See Mchy. Wanted—Veneer Machines; Motors (Electric); Sawmills, etc.)

Tex., San Antonio—Furniture—G. A. Stowers Furniture Co., increased capital from \$700,000 to \$1,200,000.

FIRE DAMAGE

Ala., Bridgeport—Bridgeport College operated by Baptist Home Mission Board.

Ala., Mobile—Mobile Box Co.'s plant at Navajo Station; loss \$80,000.

Ala., Mobile—Bender Welding Co.'s plant; loss not estimated.

Fla., Key West—Cortez Cigar Co.'s plant. Ga., Albany—Georgia Cotton Co.'s building; loss \$10,000; J. S. Billingslea, Prest.

Ga., Morven—R. D. Edmondson's store; Dr. R. J. Clower's office; Motes Garage.

Ky., Calvert City—J. N. Tichenor flour mill and warehouse.

Ky., Glasgow—Terry-Mitchell Building and other structures owned by Basil Richardson; loss \$100,000.

Ky., Henderson—Miller Chambers garage on Ingram St.; loss \$22,000.

La., Mansfield—Northwest Institute's administration building and dormitory; loss \$20,000.

Md., Baltimore—Dixie Paint & Chemical Co., plant at 48 S. Garrison Lane.

Md., Union Bridge—Union Bridge Milling Co.'s plant; loss \$15,000.

Miss., Meridian—Queen City Broom Co. plant; loss \$7,000.

Miss., West—Co-Operative Creamery; loss \$12,000.

Mo., Ferguson—D. Mitchell Hutchinson's residence, Hudson Rd. near Ferguson; loss \$25,000.

Mo., Mound City—Mound City Roofing Tile Co.'s building at 3301 Morganford Ave.; loss \$25,000.

Mo., St. Louis—Weber & Damme Wagon Co.'s shop and store room on 7th and Mulberry Sts.; loss \$15,000.

Mo., St. Louis—Valley Box & Paper Co.'s plant at 113 S. Main St.; loss \$10,000.

N. C., Lexington—Elk Furniture Co.'s machine factory; loss \$70,000.

Okla., Poteau—Poteau Mill & Elevator Co.'s flour mill and elevator; loss \$50,000.

S. C., Congaree—Residence, Elm Savannah, owned by Wm. W. Weston.

Tenn., Brownsville—Phoenix Gin Co.'s gin, boiler room and seedhouse; loss about \$15,000.

Tenn., Chattanooga—W. M. Harris' residence, 411 S. Dodds Ave.; also Mrs. S. J. A. Frazier's residence in North Chattanooga.

Tenn., Columbia—Residence of H. H. Jackson, Mgr. Grand Theater; loss \$12,000.

Tenn., Memphis—Clarke E. Coe's country residence; loss \$100,000; Caruthers Ewing's residence, 2282 Madison Ave.; loss \$5,000.

Tenn., Nashville—Residence on Gallatin Rd. of E. B. Rucker, Rucker & Cartwright; loss \$15,000.

Tenn., Rhea Springs—Bob Kimbrough's residence, Tennessee River east of Rhea Springs.

Tenn., St. Bethlehem—Mrs. Eddie B. Slaughter's building occupied by W. E. Beaumont.

Tex., College Station—College Station Postoffice.

Tex., Killeen—High school; loss \$40,000. Address School Board.

Va., Cedar Bluff—Blue Sulphur Inn owned by Mrs. C. A. Litford; loss \$25,000.

Va., Charlottesville—Rev. Henry Erving Batcheller's residence, Manor House of Shadwell, Albermarle County; loss \$35,000.

Va., Norfolk—Wm. W. Colona's residence

on Indian River Blvd. near Campostella, Norfolk County; loss \$70,000.

Va., Petersburg—Chas. Moore's residence, Bermuda Hundreds Rd.; loss \$15,000.

W. Va., Charleston—Trades School building at West Virginia Collegiate Institute; loss \$230,000.

W. Va., Charleston—Building occupied by Griffith & Rodes, sheet metal workers, total loss \$30,000.

W. Va., Charleston—Western Union Telegraph Co.'s building; loss \$100,000.

W. Va., Colcord—Pattie C. Stockdale Memorial School; loss \$15,000; Miss E. N. Robinson, Principal.

W. Va., Elkins—Cain Building, 209-211 Davis Ave.; Peter John and Jacob Litinsky's stores.

W. Va., Martinsburg—Dwelling on Boyd farm, on Opequon back of Leetown; owned by Atty. R. H. Boyd.

BUILDING NEWS

BUILDINGS PROPOSED

Apartment Houses.

Fla., Miami—Edward Eitel will erect \$14,000 apartment house, 103 N. W. 6th Ave.; 2 stories; concrete; 2 suites.

Fla., Miami Beach—Commodore J. Perry Stoltz, New York, will erect \$100,000 apartment house, Alton Rd. near 7th St.; 4 stories; 24 suites; E. B. Brun, Archt., 310 E. 10th St., New York; also plans to erect residences and another apartment house later.

Fla., St. Petersburg—Schooley-Murphy Co., P. O. Box 1299, will erect \$75,000 apartment house; 3 stories; 46x165 ft.; steam heat; hollow fireproof and interior tile; ornamental terra cotta; 36 suites; H. E. Wendell, Archt. (See Mch. Wanted—Apartment Facilities.)

Ga., Columbus—Realtors Board, John F. Flournoy, Prest., will erect \$15,000 apartment house.

Mo., Kansas City—J. G. Hiatt will erect eight 6-apartment buildings, 118-148 North Lawn Ave., and four 12-kitchenette apartment buildings, 123-137 N. Lawn Ave.

Tex., Dallas—J. L. Hofues will erect two \$33,000 apartment houses, 5328 Rowena and 2529 Ross Sts.; both 32 rooms; 8 suites; brick veneer.

Tex., Dallas—J. R. Hill will erect \$160,000 apartment house, 830-36 N. Marsalis St.; 178 rooms; 47 suites; concrete.

Association and Fraternal.

Md., Cumberland—Young Men's Christian Assn. will erect building; Shattuck & Laver, Archts., 19 S. LaSalle St., Chicago; bids opened about April 14.

Va., Dillwyn—Ancient Free and Accepted Masons will erect \$20,000 lodge building.

Bank and Office.

Fla., Bartow—Hugh W. Wear plans to erect store and office building; also plans to erect 10 dwellings; \$2,000 and up.

Fla., St. Petersburg—R. M. Hall Development Co. will erect 6-story and basement office building, Central Ave. and 4th St.; \$150,000; fireproof; steel frame; brick and terra cotta; concrete and tile floors; marble wainscoting; Barrett specification roof; oil burning boilers, vacuum heating system; mail chutes; metal ceilings; 2 high-speed electric elevators; M. Leo Elliott, Archt., Tampa; plans complete in 10 days.

Fla., Tampa—Florida Mortgage, Title & Bonding Co., Mayor Chas. H. Brown, Prest., will erect 7-story bank and office building, Franklin St.; \$500,000; 52x105 ft.

La., New Orleans—Standard Oil Co., R. A. Riddle, Supt. of Construction, United Fruit Bldg., will remodel Harmony Club Bldg. for executive offices; vault; Emile Well, Consulting Archt., Whitney Central Bldg.

Md., Baltimore—Coca-Cola Co., 1215 E. Fort Ave., Lucius R. White, Jr., Prest., will erect \$25,000 administration building; 1 story and mezzanine; 40x90 ft.; brick walls; stucco exterior; plaster interior; concrete floors; glazed tile roof; electric wiring; vaults; lockers; files; shelving; iron stairs; ventilators; Otto G. Simonson, Inc., Archt., Md. Casualty Tower Bldg.

Miss., Jackson—Lamar Life Insurance Co. plans to erect 8-story office building, Capital St.; N. W. Overstreet, Archt. (Previously noted.)

Mo., St. Louis—Federal Reserve Bank, D. C. Biggs, Gov., will erect gray granite building; \$2,500,000 to \$3,000,000; 5 stories, basement and sub-basement, with construction to permit erection of 2 additional stories if needed; elevators; vaults; electric protection devices; Mauran, Russell & Crowell, Archts.; receiving bids.

N. C., Asheville—Dr. H. H. Briggs purchased site on Haywood St. near Cumberland Ave. and plans to erect 4 or 5-story building for offices.

N. C., Greensboro—Phil G. Carlton, Inc., will erect 2-story office building, W. Market St. and Liberty Pl.; rough faced brick.

Va., Roanoke—American National Bank will erect 5-story addition to present 3-story building; brick and stone; 50x90 ft.; about \$150,000; Smithy & Tardy, Archts., Anchor Bldg.; plans ready for bids April 1.

Churches.

Ala., Birmingham—Beth-El Congregation, Max Roseman, Prest., will erect brick and stone synagogue; 70x100 ft.; main floor and basement; concrete and hardwood floors; concrete and stone foundation; steel truss and tile roof; hollow fireproof and interior tile; metal doors; ornamental terra cotta; wire glass; cost \$60,000; M. Louis Kroman, Archt., 921-22 Woodward Bldg.

Fla., Tampa—St. Johns-by-the-Sea Episcopal Church plans to erect church, parish house and rectory; to be erected in units. Address The Pastor.

Ky., Benton—Church of Christ, Rev. W. F. Etheridge, Pastor, will erect building.

La., Algiers (Station A, New Orleans)—Baptist Church, Rev. B. E. Massey, Pastor, will erect building, Seguin St. and Opelousas Ave.; ground broken.

Md., Catonsville (Branch of Baltimore)—Catonsville M. E. Church will erect church, Sunday school and parsonage, Melvin and Frederick Aves.; granite or other stone; church to accommodate 1000; \$150,000; Walter M. Gieske, Archt., Gunther Bldg., Baltimore.

Mo., Chillicothe—A. M. E. Church, Rev. T. D. Driver, Pastor, has no plans for building as lately reported.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Mo., Columbia—Lutheran Church, John C. Wagner, Prest., Lutheran Society, will erect chapel.

Mo., Hopkins—Methodist Church is considering erection of building. Address The Pastor.

N. C., Salisbury—Stalling's Memorial Baptist Church will erect \$40,000 to \$50,000 building, S. Main St.; pressed brick; granite and cement trim; accommodate 750 to 900; contract let for brick. Address The Pastor.

N. C., Statesville—First Presbyterian Church, N. B. Mills, Chmn., Finance Comm., will erect \$150,000 to \$200,000 church and Sunday school building.

Okl., Oklahoma City—Centenary Methodist Church, Rev. J. W. Miller, Pastor, will erect \$25,000 building, 13th St. and Kate Ave., Culbertson Hts.; brick and stone; basement.

Tenn., Chattanooga—Trinity Church, Rev. J. W. Bays, Pastor, will remodel building and erect Sunday school annex, McCallie Ave.; \$30,000 to \$35,000; R. H. Hunt, Archt., James Bldg.

Tenn., Nashville—Immanuel Baptist Church, West End and 17th Ave., Dr. Ryland Knight, Pastor, will erect \$60,000 Sunday school at rear of church to replace present structure; brick and steel; stone trim; frame floor construction; about 100x75 ft.; 3 stories; local stone foundations; composition roof; hollow fireproof tile; plaster board; steel sash and trim; wire glass; Hart & Nevins, Archts., 167 8th Ave., North; Freeland-Roberts & Co., Consulting Engrs., Independent Life Bldg.; plans not complete. (Lately noted.)

Tex., Corsicana—Church of Christ purchased site, N. 15th St. and W. 5th Ave. and plans to erect building. Address W. H. Warren.

Tex., Dallas—St. John's Methodist Church, Rev. T. H. Morris, Pastor, will erect auditorium, Beacon St. near Columbia Ave.; full basement; pipe organ; Sparger & Peters, Archts., Bonham.

Tex., Lufkin—Baptist Church, Rev. J. R. Nutt, Pastor, will erect building; plans drawn.

Tex., Orange—West Orange Baptist Church will erect building; Lyman Randall, Archt., West Orange.

Va., Bedford—Bedford City Baptist Church, Geo. A. Miller, Chmn. Bldg. Comm., receives bids until April 5 to erect church and Bible school building, E. Main St.; Greek type; brick; 50x140 ft.; former 1 story, latter 3 stories; wood joist floors; concrete foundations; slate roofs; auditorium to seat 500; \$50,000; Smithey & Tardy, Archts., Anchor Bldg., Roanoke; plans and specifications from Mr. Miller. (Lately noted.)

Va., Bedford—Liberty Presbyterian Church will erect Sunday school addition; 3 stories; brick; \$20,000; Smithey & Tardy, Archts., Anchor Bldg., Roanoke.

Va., Suffolk—Presbyterian Church will erect Colonial type building, Bank and Franklin Sts.; brick; Sunday school in rear; kitchen; Burwell Riddick, Jr., Archt.

W. Va., Huntington—Walnut Hills Baptist Church will erect building, Oney Ave. and Davis St. Address The Pastor.

W. Va., Matoaka—M. E. Church, South, Rev. L. D. Work, Pastor, plans to erect \$25,000 brick building; plans by Dr. J. A. Baylor, Board of Extension of M. E. Church, South, Louisville, Ky.; brick purchased. (See Mch. Wanted—Church Furniture; Organ (Pipe).)

City and County.

La., Ferriday—Town Hall—Ferriday Coopera Co., D. B. Fleming, Chmn. Bldg. Comsn., will receive bids until April 1 to erect 2-story brick town hall and lodge room; Bost & Moss, Archts., Natchez. (Lately noted.)

Mo., St. Louis—Municipal Auditorium—City, Mr. Kinsey, Prest., Board of Public Service, appointed committees to erect \$5,000,000 municipal auditorium; designing by local branch, American Institute of Architects; bonds voted. (Lately noted.)

N. C., Tarboro—Jail—Edgecombe County Board of Commrs. will receive bids until May 9 at County Commrs. office, Court House, for alterations and additions to jail; general contract to include, masonry, carpenter work, plumbing, heating and electric wiring; separate contract for steel jail work, including cell plumbing fixtures; plans and specifications from J. A. Weddell, County Auditor.

Tenn., Cleveland—Auditorium—City Council plans to erect auditorium. Address The Mayor.

Dwellings.

Ala., Ensley—W. S. Gilbert and O. C. Sparks will erect 9 dwellings, Maple St. and Warrior Rd.; faced tile construction; electric lights; gas connection; 4 to 6 rooms; total \$28,000.

Ark., Pine Bluff—Pinchback Taylor will erect brick bungalow, W. 5th and Olive Sts.; contract let.

D. C., Washington—S. C. Dawson will erect 5 dwellings, 1601-09 B St., S. E.; 2 stories; brick; total \$25,000; owner builds.

Fla., Bartow—Hugh W. Wear plans to erect 10 dwellings. (See Bank and Office).

Fla., Daytona—H. Marshall Gardiner is erecting 2 bungalows and apartment house, all stucco; oak floors; tile roofs; owner builds. (See Mch. Wanted—Tile (Roofing); Building Material).

Fla., Fort Pierce—J. Noble Thompson, Tulsa, Okla., will erect English type residence, Indian River and Dixie Highway; J. N. Sherwood, Archt., Fort Pierce and Miami. (Lately noted.)

Fla., Miami Beach—Miami Ocean View Co. will erect \$30,000 Spanish type dwelling, Star Island; hollow tile and stucco; hardwood and tile floors; 2 stories; tile roof; ornamental stone; interior tile; ventilators; August Geiger & E. L. Robertson, Archts., Miami. (Lately noted.)

Fla., Miami Beach—Mrs. Julia Wolfe, Asheville, N. C., purchased site in Ocean Front subdivision and will erect residence.

Fla., West Palm Beach—George Spieler will erect tile residence, S. Olive St. near Edgewood Ave., Southland Park; 33x36 ft.; garage 12x20 ft.

Ky., Ashland—Boyd County Realty Co., J. Claire Miller, Col. T. A. Field and others inceptd. with \$300,000 capital and will erect 100 dwellings to house employees of American Rolling Mill Co., Claire Miller, Mgr., Ashland Div.

Ky., Ashland—Joe Alexander plans to erect several bungalows, Lexington Ave. above Rogers Court; to sell from \$6000 to \$8000 each.

Ky., Dalna—Wilse Franklin & Son, Whitesburg, will erect 25 miners' houses; contract at once.

Ky., Barbourville—Barbourville Realty Co., Dr. John G. Tye, Prest., will develop 80-acre tract in South Barbourville; erect dwellings; architect not determined; John C. Main and T. F. Faulkner, Engrs.; bids opened April 1. (See Mch. Wanted—Building Material.)

Ky., Whitesburg—Ace Coal Co. will erect 10 miners' houses at Caudill near Whitesburg; contract at once.

Ky., Whitesburg—Letcher Coal Mining Co. will erect 25 miners' houses at Smoot Creek; contract in 2 weeks.

Md., Baltimore—Baltimore Development Co., Frank B. Bannister, Prest., will erect number of bungalows and cottages at Bowling Green, Philadelphia Rd. and Bowley's Lane.

Md., Baltimore—Cleveland R. Bealmear, Title Bldg. will erect 26 two-story brick dwellings, 3800-24 and 3801-25 Norfolk Ave.; 21.6x35 ft.; slag roofs; steam heat; total \$80,000; also 9 two-story brick dwellings, 3801-17 Forest Park Ave.; 22x35 ft.; slag roof; steam heat; total \$30,000; Geo. Wessel, Archt., 3001 Lytleton Rd.; owner builds. (Lately noted.)

Md., Baltimore—Mrs. Julia H. Eichelberger, 1600 N. Hilton St., will erect 3 two-story brick dwellings, 3325-29 Waldheim St.; 62.11 x36.2 ft.; slate roof; steam heat; \$12,000; S. Purcell, Archt., 1600 N. Hilton St.; owner builds. (Lately noted.)

Md., Baltimore—E. J. Gallagher Realty Co., 919 Munsey Bldg., will erect 7 two-story brick dwellings, lately noted, 2800-12 Oak St.; 17.6x38 ft.; steam heat; total \$35,000; E. J. Gallagher, Jr., Archt.; owner builds; also 31 dwellings, 4200-16, 4100-20, 4122-42 Reisterstown Rd., 22 at 2800-20, 2801-21 Santa Fe Rd. and 22 at 2801-21, 2800-20 Quantico Rd.; total \$300,000.

Md., Baltimore—Owen H. Gawthrop, 2018 Eutaw Pl., and others, will erect 2 dwellings, N. W. cor. Belle and Lewin Aves., and 2 west side Lewin Ave., near Belle Ave.; all 2 stories; brick; total \$35,000.

Md., Baltimore—Carroll D. Rudolph, 1130 Light St., will erect 2½-story residence and garage, Northway and Norwood Rd., Guilford; \$15,000.

Md., Baltimore—Charles Sanford, 421 N. Calhoun St., will erect 2 dwellings, west side South Bend Ave. cor. Rogers Ave.; 1½ stories; frame; total \$10,000.

Md., Baltimore—Broring Building Co., 2800 Harford Ave., will erect 21 two-story brick dwellings, N. E. side Broring Ave. near Belair Ave.; also 21 on S. E. side Broring Ave. near Balair Ave.; \$100,000.

Md., Baltimore—Columbia Building Co., 3311 McElderry St., will erect 27 dwellings, 400-52 N. Clinton St.; 2 stories; total \$70,000.

Md., Baltimore—North West Real Estate Co., Morris Bldg., will erect 1-story frame dwelling and brick garage, 3803 Grantley Rd.; 28x38.6 ft.; also \$6000 two-story frame cottage and brick garage, 3700 Edgewood Rd.; 26x38 ft.; both slate roof; steam heat; Geo. R. Morris, Archt.-Contr., Morris Bldg.

Md., Baltimore—Progressive Bldg. Co., 3535 Liberty Hts. Ave., will erect 16 dwellings, 2520-50 Lauretta Ave.; 2 stories; brick; total \$40,000.

Md., Baltimore—Welsh Construction Co., 11 E. Fayette St., will erect 49 dwellings, 1501-45, 1506-10, 1520-38 and 1600-09 N. Pulaski St. 2 stories; brick; total \$100,000.

Md., Hyattsville—Maryland Finance Guarantee Co. will erect 5 dwellings, Garfield Ave. near Bailey St.

Md., Mount Victoria—Cobb Island Development Co. will erect number of dwellings. (See Land Development).

Mo., Carthage—Rev. Geo. B. Norton, Rec-

tor, Episcopal Church, plans to erect 4 bungalows, Walnut and McGregor Sts.

Mo., Kirkwood (Ind. Branch St. Louis)—Majestic Homes Corp., St. Louis, purchased Mermod place, Denny Rd., and will erect 25 two-story Colonial type dwellings.

Mo., Mexico—A. P. Green, A. P. Green Fire Brick Co. will erect 2 dwellings on S. Jefferson St.

Mo., Moberly—R. R. Correll, E. O. Doyle, John Goetze and Forrest Engle will erect dwellings.

Mo., St. Charles—H. F. Keller, Ira Jones and A. B. East organized corporation to be known as Keller, Jones & Co. to promote erection and sale of houses; will erect 3 dwellings at once.

Mo., Trenton—B. A. Dockery will erect 2 bungalows, 6th and Washington Sts.

Mo., University City (Station of St. Louis)—Tegethoff & Vatterott Realty Co., Hermon Tegethoff, Prest., will erect number of 1½-story brick dwellings on 39-acre tract, Etzel and Ferguson Aves.; electric lights; total cost of improvements, \$150,000; bids opened April 1; Egdon Rapp, Engr., Clayton.

N. C., Charlotte—Citizens Improvement Co., A. H. Brown, Prest., will erect 6 and 8-room dwellings.

N. C., Forest City—W. K. Collins will erect residence.

N. C., Forest City—F. T. Davis will erect 2-story residence, Main St.

N. C., Forest City—Charles Harrill will erect residence, W. Main St.; also plans to erect bungalow near Southern Ry.

N. C., Forest City—Mayor Lowrance plans to erect bungalow, Broadway St.

N. C., Raleigh—Standard Realty & Construction Co., J. E. Beaman, Prest., will erect number of dwellings; N. C. Hines, Constr. Engr.

N. C., Reidsville—Harry Creighton Ingalls, 347 Madison Ave., New York, is preparing plans for \$200,000 to \$300,000 residence near Reidsville.

Okla., Tulsa—O. C. Hughes will erect 7 one-story dwellings, 1311-15-19-23-25-27-31 Archer St.; \$2250 each.

S. C., Chester—Eureka Cotton Mills plan to erect 60 dwellings.

S. C., Columbia—S. C. Rhame, Prest., Lower Main St. Bank, will erect residence, Wheat St. near Harden St.; 2 stories; brick veneer; Lafaye & Lafaye, Archts.; bids opened.

Tenn., Memphis—O. H. Chrisman purchased site, Buena Vista and plans to erect residence.

Tenn., Memphis—Mrs. C. M. Crump will erect bungalow, Worthington Pl. near Lamar St.; brick; stone and stucco trim; hardwood floors; 2 baths; built-in features; W. C. Lester, Archt.

Tenn., Nashville—T. O. Tune will erect two \$5000 dwellings, 1718-20 Villa St.; 6 rooms; brick.

Tex., Dallas—A. J. Cammack will erect \$10,000 brick veneer cottage, 720 Russell St.; 6 rooms.

Tex., Dallas—M. B. Cohen will erect \$10,000 brick veneer residence, 2822-24 Cleveland St.; 16 rooms.

Tex., Dallas—J. B. King will erect \$10,000 dwelling, 716 Russell; brick veneer over frame; 6 rooms; also \$10,000 six-room brick veneer cottage, 717 Lipscomb St.

Tex., Dallas—C. M. Dillon will erect 9 one-story brick dwellings, 600 block Tyler St.; total \$46,000.

Tex., Dallas—R. S. Etheridge will erect 3 six-room frame cottages, 5606, 5610, 5612-13

Alta St., and 6-room frame, 2-apartment building, 5600-02 Alta St.; total \$13,000.

Tex., Dallas—J. E. Lee will erect \$30,000 residence, 2523 Turtle Creek Blvd.; 10 rooms; hollow tile.

Tex., Dallas—J. B. Rucker will erect \$16,000 residence 4327 Rawlins St.; 2 stories; brick veneer and tile.

Tex., Houston—Thos. M. Murray will erect 2-story stucco dwelling.

Va., Chatham—Emmanuel Episcopal Church, Rev. T. G. Faulkner, Rector, will erect parsonage on Main St.; brick.

Va., Richmond—J. L. Treste, 207 W. Sycamore St., will erect 2 frame dwellings, 3311-13 Woodrow Ave.; 2 stories; 28x28x28 ft.; wood floors; cinder block foundation; tin roof; hot water heat; about \$12,500; plans and construction by owner.

Va., Richmond—Walter Schaaf will erect 5 seven-room brick dwellings, 5th Ave., and 2 on 4th Ave.; 5 eight-room stucco and 3 eight-room brick dwellings, Westhampton; 3 dwellings, Stonewall Courts; total \$150,000; also plans to erect additional dwellings, some on Dooley Ave.

Va., Roanoke—Joe Crawford, Ch. Engr., N. & W. Ry., will erect \$20,000 residence; hollow tile; slate roof; Smithey & Tardy, Archts., Anchor Bldg.

Va., Roanoke—Miss Harris, Virginia College, will erect \$15,000 residence; Smithey & Tardy, Archts., Anchor Bldg.

Va., Roanoke—J. W. McCauley will erect \$12,000 hollow tile and stucco residence; Smithey & Tardy, Archts., Anchor Bldg.

Va., Roanoke—N. D. Maher, Prest., N. & W. Ry., will erect \$25,000 residence; frame; tile roof; Smithey & Tardy, Archts., Anchor Bldg.

Va., Roanoke—George Payne will erect \$25,000 residence; Smithey & Tardy, Archts., Anchor Bldg.

W. Va., Charleston—Lawrence Kauffman will erect \$16,000 residence, 1711 Quarrier St.

Government and State.

Md., Centreville—Armory—State will erect \$50,000 National Guard Armory. Address Maryland National Guard, Howard St. Armory, Baltimore.

Hospitals Sanitariums, Etc.

Mo., Kirksville—Dr. Ezra Grim will erect brick nurses' home for Grim Hospital, Franklin St. and Patterson Ave.; construction to begin April 1.

N. C., Asheville—Western Carolina Sanatorium, Inc., Dr. Wm. B. Rannels, C. M. Parrish and Mrs. B. D. Austin organized with \$100,000 capital stock to erect sanatoriums and conduct training schools for nurses.

Tex., Port Arthur—Hospital Board, J. H. Washburne, Prest., will erect annex to negro wing at hospital; accommodate 25 additional.

Hotels.

Ark., Russellville—R. B. Oliver, Conway, M. R. Craig, Russellville, and others will erect hotel.

Fla., Daytona—N. B. Kennedy, Wm. Haslett and others purchased Hotel Adirondack and Hotel Poinsettia and will remodel.

Fla., Miami Beach—Colonel Roosevelt Hotel Co., Miss W. S. Pratt, Miami, and others, are reported to erect \$1,000,000 hotel on Washington Ave.; Grecian type; 300 rooms with private bath; dining room to seat 1000; ball room to accommodate 2000; Louis Kamper, Archt., Book Bldg., Detroit, Mich.

Fla., Ormond Beach—Jas. P. Vining will

erect \$250,000 hotel; fireproof; hollow tile and stucco; also 2-story clubhouse, 62 ft. long; Magaziner, Eberhard & Harris, Archts., 603 Chestnut St., Philadelphia, Pa.

Fla., Tampa—C. L. Knight & Son will organize holding company to be financed by Adair Realty & Trust Co. for erection of 15-story hotel at Florida Ave. and Lafayette St.; 250 rooms.

Fla., Tavares—R. E. Goodell is promoting company to take over Highland Club Hotel and erect addition.

Fla., Palm Beach—H. C. Curtis, Chattanooga, Tenn., will erect Billows Hotel at Worth Ave. and Ocean Blvd.; \$80,000; 70x150 ft.; 3 stories; Spanish renaissance type; semi-fireproof; brick and tile; wood and tile floors; concrete foundation; built up roof; metal doors; ventilators; steam or vapor heat; bids opened April 10; Wm. Manly King, Archt., West Palm Beach. (Lately noted).

Fla., West Palm Beach—C. J. Meerdink will erect \$150,000 hotel at Datura and Rosemary Sts.; Spanish type; 95x98 ft.; 106 rooms; semi-fireproof; owner builds.

Ky., Louisville—Citizens' Hotel Co is reported to erect \$3,000,000 hotel at 5th and Walnut Sts.; 18 stories; 124x150 ft.; 600 rooms; 2 top floors for convention hall, 72x121 ft.; Italian renaissance type; brick, stone and terra cotta; Brinton B. Davis, Archt.; W. K. Stewart, Chmn., Comm.

Md., Hagerstown—Hagerstown Hotel Co. inceptd. with \$1,000,000 capital by J. J. Porter, Clarence C. Doub, Ernest Newcomer and others, plans to erect hotel; 12 stories; 180 rooms.

Md., Hagerstown—D. Ramacciotti plans to erect \$300,000 hotel on site of Central building; 10 stories.

N. C., Burlington—Burlington Hotel Corp., R. L. Holt, Prest., will erect hotel on S. Main St.; Chas. C. Hartman, Archt., Greensboro. (Previously noted.)

N. C., Southern Pines—A. L. Auf der Heide will erect 60-room hotel.

Okla., Pauls Valley—J. C. Moody, Mgr., Whittington Hotel, Ardmore, will erect hotel; \$65,000 to \$100,000; 4 stories; 100x40 ft.; reinforced concrete; cement floor and foundation; Andrew Frasier, Archt., Ardmore. (Lately noted.)

S. C., Anderson—U. G. Salla, Prop., Salla Hotel, will erect addition and remodel building.

Tenn., Cleveland—B. D. Moore and associates will erect 60-room hotel at Broad and 31st Sts.

Tex., Greenville—Sam E. Beckham will enlarge and remodel buildings for 4-story hotel.

Va., Smithfield—D. W. Skyes will erect hotel on Main St.; gray stucco.

Miscellaneous.

Fla., Daytona Beach—Amusement—Daytona Beach Amusement Park will erect number of buildings; Spanish mission type.

Fla., Stuart—Clubhouse—St. Lucie River Country Club, Joe Vendig, Prest., will construct clubhouse and 18-hole golf course on St. Lucie River, south of Stuart; plans for golf course by Langford & Moreau, Chicago.

Mo., Kansas City—Memorial—Liberty Memorial Assn., R. A. Long, Prest., will erect memorial; H. Van Buren Magonigle, Archt.

Mo., St. Louis—Clubhouse—Town Club, 1120-22 Locust St., will erect addition to club building.

N. C., Southern Pines—Clubhouse—Southern Pines Country Club will erect \$50,000

clubhouse; 9-hole golf course; Aymar Embury, 2nd, Archt., 132 Madison Ave., New York.

Tex., Fort Worth—Amusement Park—Texas Amusement Co., E. G. Wallace, O. H. Atkinson and others will construct amusement park to include 190x250 ft. concrete swimming pool, bath houses, theater and auditorium to seat 1500, business block, etc.; plans by Mr. Atkinson.

Va., Roanoke — Clubhouse — Roanoke Country Club will erect \$75,000 building; stucco and hollow tile; slate roof; bids opened March 26; Smithey & Tardy, Archts.-Engrs., Anchor Bldg.

Railway Stations, Sheds, Etc.

Ky., Lexington—Southern Railway Co., A. A. Woods, Ch. Eng., Lines West, Cincinnati, O., will erect freight depot to replace structure lately noted burned.

La., Rayville — Richland Parish School Board, J. L. Anding, member, contemplates erection of brick high school in Ward One; election soon on \$150,000 bonds.

Miss., New Albany—Town will vote on \$75,000 bonds to repair school and erect high school. Address School Board.

N. C., Lexington—Southern Ry. Co., A. A. Woods, Ch. Eng., Cincinnati, O., will erect passenger station; 35x95 ft.; brick and tile; tile roof.

S. C., Gaffney—Gaffney School Dist. No. 10 will vote March 27 on \$300,000 bonds; N. H. Littlejohn, Chmn., Board of Trustees. (Lately noted.)

Tenn., McKenzie—McTyeire School, J. A. Robins, Principal, will erect \$35,000 building.

Va., Covington—Home for Homeless Boys, Dr. F. R. Rogers, Supt., will rebuild Paul C. Edmunds Memorial Hall lately noted burned at loss of \$20,000.

Va., Dillwyn—Chesapeake & Ohio R. R., F. I. Cabell, Ch. Engr., Richmond, does not contemplate erection of freight and passenger station as lately reported.

Schools.

Ala., Birmingham—Board of Education will erect school; plans and specifications at office D. O. Whildin, Archt., Title Guarantee Bldg.

Ala., Gadsden—City Board of Education, Jno. H. Disque, Chmn., will receive bids until April 15 to erect \$100,000 high school on 12th St.; 2 stories and basement; 239x50 ft.; auditorium, 64x116 ft.; brick, stone and hollow fireproof tile; 5-ply gravel roof; concrete and wood floors; concrete foundations; metal ceilings; interior tile; ventilators; plans and specifications at office A. Duncan Simpson, Archt. (Lately noted.)

D. C., Washington—George Washington University will erect \$250,000 building at 21st and G Sts., N. W.; plans by Albert L. Harris, Prof. in architecture at university.

La., Baton Rouge—Louisiana State University, R. L. Himes, Secy., Bldg., Comm., will erect \$350,000 stadium; seating capacity 25,000.

Md., Baltimore—Board of Awards, Mayor Wm. F. Broening, Prest., will receive duplicate bids until April 4 at office Richard Gwinn, City Register, City Hall, to erect senior-junior high school for negroes; \$1,000,000; 300 x 270 ft.; 3 stories; reinforced concrete, brick and stone; slag roof; wood, mastic, cork and tile floors; concrete foundations; hollow fireproof tile; steel sash and trim; wire glass; metal doors; vaults; steam heat; plans and specifications at office of H. G. Perring, Supervising Eng., Public Improvement Comsn.; Owens & Sisco, Archts., Continental Bldg.; Chas. F. Reeder, Eng., 916 N. Charles St. (Lately noted.)

Miss., Crystal Springs—City defeated \$85,000 bonds to erect school. (Lately noted.)

Miss., Laurel—School Board will rebuild Silas Gardiner School noted burned at loss of \$40,000.

Miss., Oxford—Tallahatchie Consolidated School Dist. will erect school and teacherage. Address Lafayette County Supt. of Education.

Miss., Oxford—Board of Education plans to erect school; N. W. Overstreet, Archt., Jackson; election April 6 on \$75,000 bonds. (Lately noted.)

Miss., Port Gibson—School Board plans to erect high school; will vote on \$50,000 bonds.

Mo., Alma—School Board will erect addition to building; \$28,000 bonds voted.

Mo., Boonville—Board of Education contemplates erection of school building.

Mo., Cassville—City will vote April 3 on \$15,000 bonds to erect high school. Address Board of Education.

Mo., Clark—School Board plans to erect 5-room building; election April 3 on \$15,000 bonds.

Mo., Clayton (Ind. Sta. of St. Louis)—John Burroughs School Trustees, Louis H. Egan and others will erect main building at Price Rd. and Clayton car line; 360 ft. long; 10 classrooms, 2 study halls, library, museum room, 2 science laboratories, workshop, domestic science department, etc.; auditorium to seat 400; gymnasium, 50x84 ft.; LeBaume & Klein, Archts., St. Louis.

Mo., Crane—Crane School Dist. will vote April 3 on \$30,000 bonds to erect building. Address Dist. School Trustees.

Mo., Joplin—City will vote April 3 on \$75,000 school bonds; Jesse Zook, Secy., Board of Education.

Mo., Kansas City—Unity School of Christianity, 10th St. and Tracey Ave., will erect 3-story building; 65x40 ft.

Mo., Odessa—School Board plans to erect addition to high school; election April 3 on \$60,000 bonds.

Mo., Plattsburg—School Board will erect \$38,000 addition to high school; bonds voted. (Lately noted.)

Mo., St. Charles—Lindenwood College, Dr. Jno. L. Roemer, Prest., will erect \$50,000 dormitory; 2 stories; brick and stone.

Mo., Trenton—City will vote April 3 on \$200,000 bonds to erect \$185,000 high school and ward building. Address School Board. (Lately noted.)

Mo., Willow Springs—Board of Education plans to erect high school and remodel present structure for grade school; considering bond election.

N. C., Carthage—School Trustees, U. L. Spence, Chmn., will receive bids until April 3 for general construction of high school, including mechanical and other equipment; \$75,000; 3 stories; ordinary construction; plans and specifications at office C. Gadsden Sayre, Archt., Anderson, S. C. and Raleigh, N. C. (Previously noted.)

N. C., Ernul—Craven County Board of Education, R. S. Proctor, Supt. of Schools, New Bern, will erect \$20,000 school; brick; 8 rooms; accommodate 600.

N. C., Greenville—Building Committee, East Carolina Teachers' College will receive bids until April 4 for construction service buildings, additions, remodel, fireproof present buildings, etc., over period of two years;

\$950,000; H. A. Underwood, Eng., Commercial Bank Bldg., Raleigh.

N. C., Mount Airy—City, A. V. West, Mayor, will vote April 10 on \$60,000 bonds to erect 16-room addition to high school, complete repairs on Rockford St. building, improve North Main Graded School, colored school, etc.

N. C., Swannanoa—Buncombe County Board of Education, Frank L. Wells, Supt., will receive bids until April 4 to erect high school; plans and specifications at office Frank B. Simpson, Archt., Raleigh.

N. C., Wallburg—Liberty-Piedmont Institute will erect girls' dormitory.

S. C., Charleston—City Board of School Commrs., A. Burnett Rhett, Supt. of Schools, will receive bids until April 4 to erect annex to Burke Industrial School, 207 President St.; plans and specifications at office Simons & Lapham, Archts., 42 Broad St.; will also receive bids until April 4 to alter present stairs to fireproof stairs together with other work at Memminger School; plans and specifications at office of Bensen & Barbot, Archts.

S. C., Union—Lockhart Mills Co., E. Nicholson, Treas., will erect school at Monarch Mills; 2 stories; 15 rooms; bids opened April 11; Harold Tatum, Archt., Columbia.

Tenn., Benton—Polk County Board of Education, R. L. Kirkpatrick, Chmn., will erect 8 county school buildings; 6 frame, one brick and addition to Copperhill School; bids opened Feb. 26; Manley & Young, Archts., Knoxville.

Tenn., South Pittsburg—City School Board will erect building; brick; stone trim; 13 rooms; bids opened March 27; W. H. Sears, Archt., Chattanooga. (Lately noted.)

Tenn., Tusculum (R. D. from Greenville)—Dr. C. O. Gray will receive bids until April 2 to erect dormitory for boys; separate bids for heating; 40x100 ft.; brick; plans and specifications at office D. R. Beeson, Archt., Johnson City.

Tex., Corsicana—School Board, H. D. Filiep, Supt., will erect high school, ward school and enlarge present structures.

Tex., Ganado—Ganado Independent School Dist. voted \$40,000 bonds. Address Dist. School Trustees.

Tex., Iowa Park—Iowa Park Independent School Dist. Trustees plan to erect building; election March 27 on \$60,000 bonds. (Previously noted.)

Tex., Muleshoe—School District No. 4 will erect \$10,000 building; brick; R. W. Kaufman, Archt., Amarillo. (Lately noted.)

Tex., Sharp (R. D. from Buckholts)—Sharp Independent School Dist. Trustees plan to erect brick school.

Tex., Tyler—City voted \$250,000 bonds to erect junior high school and make improvements to ward schools. Address Board of Education. (Lately noted.)

Tex., Wellington—Wellington Independent School Dist. will vote April 2 on \$55,000 bonds to erect high school. Address Dist. School Trustees.

W. Va., Charleston—City will vote May 15 on \$1,350,000 bonds to erect 8-room school in upper Bigley and Magazine, similar building in Swann Hill section, Charleston Street Junior High School, 6-room structure on Truslow St., 4-room building at Washington and Jefferson Sts., improvement to Fern Bank school grounds, 4-room Island school, 2-room school at South Hills, repairs to Washington School, and land for colored high school; all buildings fireproof. Address Board of Education.

W. Va., Salem—Board of Education, T. J. Coffman, Prest., will receive bids until April

5 to complete West End School; plans and specifications at office Stephen W. Ford, Archt., Latstetter Bldg., Clarksburg, and office A. S. Arnett, Secy., Bd. of Education, Salem.

Stores.

Ala., Huntsville—Madison Furniture Co. is reported to erect \$100,000 building on Clinton St.; 4 stories.

Fla., Bradentown—J. R. Mickler will erect building on Pine St., south of Manatee Ave.

Fla., Bradentown—J. K. Singletary will erect building on Pine St. between Manatee and Washington Aves.; 2 stories; hollow tile, stucco and brick.

Fla., Eustis—Merrill & Strobel, Umatilla, will erect business block.

Fla., Lakeland—S. H. Collins, 79 Leonard St., New York, will erect arcade building on S. Tennessee Ave.; \$25,000; 2 stories; 40x122 ft.; 37 shops; Spanish architecture; hollow tile, stucco, steel frame and hollow fireproof tile; composition, wood and concrete floors; concrete foundation; built-up asphalt roof; sky lights; ventilators; ornamental terra cotta; Herbert D. Mendenhall, Archt., Lakeland. (See Machinery Wanted—Show Cabinets.)

Fla., Tampa—C. C. Spencer will erect \$70,000 store and garage; 200 ft. square; 1 story and mezzanine; brick and steel; built up composition roof; tile and cement floors; bldg. opened March 23; M. Leo Elliott, Archt.

Ky., Ashland—C. T. Scott will erect 3-story business building on Winchester St.; 42x142 ft.; reinforced concrete and brick; construction under supervision of Mr. Scott and L. E. Payne; Tyson & Foster, Archts.

Ky., Catlettsburg—L. Lefkowitz will erect 2-story business building on Center St.

La., New Orleans—Sam Fertel will erect 2-story store and apartment on S. Rampart St., near Gravier St.; \$25,000; brick; Weis & Dreyfous, Archts., Maison Blanche Bldg.

La., New Orleans—A. P. Schiro will erect building at Canal and S. Rampart Sts.; \$50,000.

Md., Baltimore—Wm. V. Gallagher, 1640 Pennsylvania Ave., will erect 2-story fireproof building; 60x115 ft.; about \$10,000.

Mo., Cape Girardeau—Louis Hecht will erect 4-story building on Main St.; plans by Mr. Knox, H. N. Bldg. (Lately noted.)

N. C., Forest City—Josh McMurray plans to erect store on E. Main St.

N. C., Forest City—R. S. Webb will erect store on E. Main St.

N. C., Gastonia—W. T. Rankin will erect building for grocery store, offices and automobile show room; \$35,000; 3 stories; 75x75 ft.; brick; freight elevator; White, Streeter & Chamberlain, Archts.

N. C., Mount Airy—Martin Bennett will erect store building; 2 stories; 30x115 ft.; E. J. Caudle and T. D. Roberts will supervise construction.

Okla., Tulsa—Stephens & Stephens Sheet Metal Co. will erect 3-story brick store at 1435 E. 6th St.; \$42,000.

S. C., Greenville—Luther M. McBee will remodel Grand Opera House for business building; \$25,000.

S. C., York—J. Ross Cannon will erect 2-story brick store and apartment building on Main St.

Tenn., Memphis—Al Goldfarb will erect \$45,000 business building on Union Ave.; E. L. Harrison, Archt.

Tex., Dallas—P. R. Freeman will erect \$15,000 store, 2007 Bryan St.; 2 stories; brick.

Tex., Dallas—Arthur L. Kramer will erect \$12,000 store, 4226-28 Main St.; 2 stories; brick.

Tex., El Paso—G. W. Roberts will erect \$12,000 store in Bassett Addition; 2 stories; brick.

Tex., Houston—Hencke & Pilot will erect store on Main St.

Tex., Plainview—T. O. Collier will erect \$30,000 building at 7th and Austin Sts.; brick.

Tex., Robstown—Ligon & Ollre will erect building at 5th St. and Avenue A; 75x100 ft.; brick.

Tex., Waxahachie—Rudolph Bros. & Walker will erect 2-story brick and stucco building.

W. Va., Clarksburg—D. M. Davis will erect \$30,000 building at Bailey and Pike Sts., in Point Comfort; 2 stories; 40x85 ft.; brick, tile and steel; first floor for store; second, apartments.

W. Va., Sutton—L. A. & O. L. Holcomb will erect 2-story store and office building on Main St.

W. Va., Sutton—Louis Lombard will erect 2-story fireproof building on Bridge St.

W. Va., Sutton—Dave Levkevitz will erect business building on Main St.; 2 stories.

Theatres.

Tex., Dallas—Little Theater, Pat Murphy, Chmn., Bldg. Comm., will erect \$60,000 building on Olive St.; Spanish architecture; auditorium to seat 400.

BUILDING CONTRACTS AWARDED

Apartment Houses.

N. C., Winston-Salem—Winston-Salem Apartment Co., Thos. Maslin, Secy-Treas., will erect 4-story apartment house adjoining Alexander Apts., W 4th St.; 3 units separated by fire wall; 70x170 ft.; brick; 2 elevators; garage space; 36 suites of from 2 to 5 rooms; about \$200,000; Realty Bond Co., Contr. (Previously noted.)

Okla., Tulsa—J. C. Redden, 320 Kennedy Bldg., will erect 2 apartments; Irving Williams, Contr., 1144 S. Owassa St.; excavation begun. (See Mch. Wanted—Angle Irons (Steel); Beds (In-a-door); Refrigerators; Apartment Facilities.)

Tenn., Nashville—Floyd & Wampler Co. will erect \$50,000 apartment house, 19th St. and Capers Ave.; P. E. Dunnivant Construction Co., Contr.

Tenn., Nashville—Pritchett-Thomas Co. will erect Peabody Court Apts., adjoining Hillsboro Court Apts., Hillsboro Rd. and Pierce Ave.; 3 stories; Chattanooga mat brick; 30 suites of 2, 3 and 4 rooms; Murphy in-a-door beds; Asmus & Clark, Archts.; H. J. Jacobs, Contr.

Va., Richmond—C. A. Cook, 8th and Governor Sts., will erect 2 buildings, 1308-10 E. Franklin St.; \$23,000; brick, steel and concrete; 2 stories; 42x140x35 ft.; concrete foundations; wood floors; slag roofs; steam heat; Carneal & Johnston, Archts., Chamber of Commerce Bldg.; J. Fox & Co., Contrs., 25th and Franklin Sts.

W. Va., Huntington—Mrs. Cora B. McAvoy will erect \$35,000 apartment house, 12th Ave. and 11th St.; 3 stories; 6 five-room suites; J. J. West, Contr.

Association and Fraternal.

Miss., Jackson—Ancient Free and Accepted Masons, Geo. B. Power, Thad B. Lampton and others, Bldg. Comm., will erect \$350,000 temple, W. Capitol and Rose Sts.; 146x298 ft.; Scottish Rite Hall to seat 450, Shrine

Tex., Texarkana—Saenger Amusement Co. will erect \$100,000 theater; fireproof; brick; stone trim.

Warehouses.

Ky., Louisville—Standard Oil Co. of Kentucky will erect \$10,000 warehouse at 6th and Bloom Sts.

N. C., Gastonia—P. P. Leventis will erect \$20,000 warehouse; 2 stories and basement; 60x100 ft.; brick; White, Streeter & Chamberlain, Archts.

N. C., Raleigh—N. E. Edgerton will erect cotton warehouse; 12,000-bale capacity; J. M. Workman, Archt., will supervise construction.

S. C., Columbia—Palmetto Compress Co. will erect \$50,000 warehouse, Divine and Pulaski Sts.; 4 stories; brick.

Tenn., Knoxville—Knoxville Lumber & Mfg. Co., R. C. Poweregat, Prest., plans to erect \$200,000 bonded warehouse on Park Ave.; Moores & Dunford, Archts., Chicago, Ill. (Lately noted.)

Tex., Dallas—C. R. Jackson will erect \$22,000 warehouse, 201-3 S. Pacific St.; 2 stories; brick.

Tex., Houston—Kent H. Easter Co. will erect \$12,000 warehouse at Polk Ave. and Live Oak St.

Va., Dillwyn—Tobacco Growers Co-operative Assn., S. W. Shepard, Mgr., will erect warehouse; 260x60 ft.

Hall to seat 2250, dining room to seat 1200; kitchen, showers, etc.; H. W. Whitcover, Archt., Savannah, Ga.; I. C. Garber, Contr. (Previously noted.)

Mo., St. Charles—Knights of Columbus will erect 2-story and basement brick building; gymnasium on first floor, club rooms above; John Wetter, contr., at \$28,274.

Okla., Oklahoma City—Oklahoma Lodge No. 417, B. P. O. E., will erect \$350,000 building, 3rd St. and Harvey Ave.; reinforced concrete, stone and brick; 5 stories; first 2 floors for lodge, balance for offices; Chas. M. Dunning Construction Co., Contr. (Previously noted.)

Bank and Office.

Ark., Nashville—Planters Bank & Trust Co. will erect \$40,000 building, Main and Howard Sts.; 84x50 ft.; concrete and tile floors; concrete foundation; asphalt roof; Witt, Selbert & Halsey, Archts., Texarkana; A. B. Cupp, Contr., Nashville; Sodaman Heat & Power Co., St. Louis, heating.

Ga., Atlanta—Glenn Estate will erect \$400,000 office building, Marietta and Spring Sts.; 10 stories; 80x90 ft.; concrete frame; limestone and face brick; concrete and terrazzo floors; concrete foundation; slag roof; hollow fireproof and interior tile; metal doors; mail chutes; ventilators; ornamental terra cotta; steel sash and trim; wire glass; Otis elevators; Waddy B. Wood, Archt., 816 Connecticut Ave., Washington; Bealer & Biggers, Supervising Archts., Atlanta; Thos. W. Marshall, Engr., Washington; Geo. A. Fuller Co., Contr., Fuller Bldg.; Harry Alexander, electrical work; both New York; heating and plumbing not let. (Lately noted.)

La., New Orleans—H. J. Balter will remodel 4-story building, Union and Carondelet Sts.; convert 3 upper floors into offices; Favrot & Livaudais, Archts., Hibernia Bank Bldg.; Gervais F. Favrot, Canal Commercial Bldg., contr. at \$31,562.

Tex., Elgin—Elgin National Bank will

erect \$27,000 bank and store building; 45x125 ft.; 1 story brick; concrete floors and foundation; Barrett specification roof; H. F. Kuehne, Archt., Littlefield Bldg., Richard Schmidt, Contr., Rainey St.; J. O. Andrew-Arther & Co., steam heat, electric lighting and plumbing; all Austin. (Lately noted.)

Va., Winchester—Commercial & Savings Bank will erect building, Main and Piccadilly Sts.; J. L. Crouse, Contr., Greensboro, N. C.

Churches.

Fla., Jacksonville—St. Paul's Catholic Church, Rev. Father Barry, Pastor, will erect \$70,000 unit of \$100,000 church, Forbes and Acosta Sts.; Italian renaissance type; brick and stone; 3 stories; 62x105 ft.; wood floors; concrete foundation; tile roof; Gerald Barry, Archt., Chicago, Ill.; Marsh & Saxalby, Supervising Archts.; G. W. Hessler, Inc., Contr., 207 West Bldg.; Chapman & Walker, heating and plumbing; S. C. Reddick, electric lights; Craig & Son, plastering; all Jacksonville. (Lately noted.)

Tenn., Chattanooga—Second Presbyterian Church, W 7th and Pine Sts., C. V. Brown, Chmn. Bldg. Comm., will erect \$70,000 Sunday school addition; reinforced concrete and brick; 3 stories; 80x117 ft.; composition roof; J. D. Alsop, Archt., Geo. Becking & Son, Contrs.; materials contracted for. (Lately noted.)

Tex., Sweetwater—Church of Christ will erect brick building; T. Copeland, Contr.

W. Va., Clarksburg—Methodist Episcopal Church will erect building; Salem Bridge & Construction Co., Contrs.

Dwellings.

D. C., Washington—National Realty Co., will erect 12 brick dwellings, 19th and B Sts., S. W.; Geo. W. Barkman, Contr.

Ga., Rome—Anchor Duck Mills, J. S. Bachman, Supt., will erect 10 employees' dwellings; \$2000 each; 1 story; 4 rooms and bath each; T. B. Broach, Contr.; construction begun, pine floors; brick foundations; asbestos roofs. (Lately noted.)

La., New Orleans—Mrs. Clara Moran will erect \$12,500 triplex residence, 2221 Baronne St.; Jos. E. Armon, Contr.

Md., Baltimore—Howard R. Taylor, Howard R. Taylor & Co., will erect residence, Somerset Rd. near Overhill Rd., Roland Park; 12 rooms and 3 baths; J. S. Downing Co., Contr., 2600 Greenmount Ave.

Md., Baltimore—Herbert H. Neely, 121 South St., will erect 2½-story frame dwelling, 3608 Grantley Rd.; 28x34 ft.; \$10,000; O. E. Adams, Archt.-Contr., 833 Equitable Bldg. (Lately noted.)

Mo., Carthage—D. G. Wells will erect residence; Colonial type; 18 rooms, sunparlor and sleeping porches; A. S. Dierdorff, Contr.

S. C., Arcadia—Arcadia Mills, H. A. Ligon, Jr., Pres., Spartanburg, will erect 50 operatives' dwellings in connection with mill construction; Bryson & Webber, Contrs., Spartanburg.

S. C., Woodruff—Mills Mill No. 2, Dr. H. A. Ligon, Prest., Spartanburg, will erect 10 operatives' dwellings; Bryson & Webber, Contrs., Spartanburg.

Tenn., Chattanooga—Somerville Iron Works, North Chattanooga, will erect 10 frame employees' dwellings, Harper and Manning Sts.; 4 rooms each; about \$15,000; D. N. Smith, Contr.

Tex., Houston—C. E. Bennett will erect 2-story brick veneer residence; New England Colonial type; Thos. M. Murray, Contr.

Tex., San Antonio—Mrs. H. Sellinger will

erect frame residence, Tobin Hill; David A. Lown, Archt.; Wm. Cook, Contr.; Martin Wright, electrical work; San Antonio Paint & Roofing Co., painting and papering; Lehne Bros., floor finishing; L. Passur, plumbing. (Lately noted.)

Va., Richmond—Elmer Hare, 3404 Maryland Ave., will erect 2 dwellings, 3402 Enslew St.; concrete and brick foundation; 26x30x30 ft.; wood floors; slate roof; hot water heat; \$13,000; plans by owner; P. D. Perkins, Contr., 3406 Enslew St.

Va., Richmond—Chas. Schneider, 1000 S. Randolph St., will erect brick dwelling, 3126 Kensington Ave.; \$10,000; 2 stories; 22x56x28 ft.; brick foundation; wood floors; tile roof; hot water heat; plans by owner; C. H. Archer, Contr.

Government and State.

La., Baton Rouge—Capitol—State, John M. Parker, Gov., State House, will repair and fireproof Capitol Building; Emile Weil, Archt., Whitney Central Bldg.; R. J. McBride, Contr. at \$24,197; both New Orleans. (Lately noted.)

Hospitals Sanitariums, Etc.

Ky., Louisville—St. Anthony's Hospital will erect \$250,000 addition, Barratt Ave. and St. Anthony's Pl.; 4 stories and basement; 100 beds; include training school for nurses, maternity dept., ambulance dept., etc.; D. X. Murphy & Bro., Archts.; J. T. Russell & Co., Contrs. (Lately noted.)

Miss., Sanatorium—State Bond Improvement Comn. of Miss., P. O. Box 636, Jackson, will erect fireproof building for negroes at Mississippi Tuberculosis Sanatorium; 2 stories; brick; reinforced concrete and hollow tile floors; concrete foundation; vapor steam heat; conduit system of lights; accommodate 40; Bem Price, Archt., Jefferson County Bank Bldg., Birmingham, Ala.; Eure Construction Co., Hattiesburg, contr., at \$35,000, exclusive of wiring, heating and plumbing; Dr. Henry Boswell, Supt., Sanatorium, will purchase equipment. (Lately noted.)

Hotels.

Ala., Mobile—Hotel Raynor, J. Nelson, Prop., will erect 3-story annex; brick; Gully & Craig, Contrs.

Fla., St. Petersburg—C. M. Roser, 110 Fifth St., south, will erect 6-story hotel; \$150,000; 100 rooms with bath; fireproof; concrete and steel; cement floors; partitions to be plastered on steel; Edgar Ferdon, Archt.; Dillman & Wright, Contrs.

Ga., Atlanta—Ben J. Massell will erect \$500,000 hotel at Luckie and Cone Sts.; 62x100 ft.; 12 stories and basement; fireproof; reinforced concrete floors and foundation; gravel roof; hollow fireproof tile; metal doors; ventilators; plaster board; vault lights; mail chutes; 2 passenger and 1 freight elevators; E. C. Seiz, Archt.; Massell Realty Co., Contr.; sub bids until April 15. (Lately noted.)

N. C., Lexington—W. L. Hepler, Greensboro, will erect \$25,000 hotel at Willomoor Springs, 10 miles from Lexington; 2 stories; 114x32 ft.; frame; wood floors; rock foundation; asphalt shingle roof; 50 rooms, 3 baths, shower and tub, sewer line 1200 ft., 4 in. pipe; J. Robt. Holt, Archt., Greensboro; N. K. Dean, Contr., Oakland Ave., Greensboro. (Lately noted.)

Va., Norfolk—Mrs. Jno. Norton Webb will erect 60-room apartment hotel at Redgate Ave. and Manteo St.; 4 stories; brick; Bernard Spigel, Archt.; Graham & Co., Contrs.

Va., Staunton—Stonewall Jackson Hotel Corp., A. T. Moore, Prest., will erect hotel,

Market and Kalamazoo Sts.; \$425,000; 5 stories; 75x146 ft.; 120 rooms with bath; brick, concrete and steel; fireproof floors; concrete foundation; built up asphalt roof; hollow fireproof and interior tile; metal doors; wire glass; ventilators; 2 passenger elevators, traction type; H. L. Stevens & Co., Archts.-Contrs., 522 Fifth Ave., New York. (Lately noted.)

Va., Winchester—J. L. Crouse, Greensboro, N. C., has contract to remodel Hotel Evans; 27 rooms.

W. Va., Charleston—Federal Hotel Co. chartered with \$2,500,000 capital; S. B. Chilton, J. E. Chilton, J. H. Moore and others, inceptors; will erect \$1,900,000 hotel at Dunbar and Kanawha Sts.; 13 stories and basement; 147x135 ft.; 424 guest rooms; limestone, brick, hollow fireproof and interior tile; concrete foundation; asphalt roof; concrete arches; hardwood floors; metal doors; ornamental terra cotta; rolling partitions; vaults; wire glass; vault lights; bids wanted on heating, plumbing, electric lighting, elevators, etc.; Bertram Cunningham, Inc., Archt., 565 5th Ave., New York; Ring-Hartman Co., Inc., Contr., Pearson Bldg., Chicago.

Miscellaneous.

Fla., West Palm Beach—Dance Hall, etc.—Gus' Baths, Inc.; Gus Jordahn, Prest., will erect dance hall, 12 apartments and 4 stores; Harvey & Clark, Archts.; H. C. Daniels, Contr.

La., New Orleans—Pavilion—City Park Improvement Assn., E. W. Smith, Prest., will construct refreshment pavilion; H. W. Bond & Bro., Contrs.

Schools.

Ala., Troy—State Normal School, Dr. E. M. Shackelford, Prest., will erect training school; \$49,500; 153x184 ft.; 1 story; hollow tile and stucco; tile roof; concrete and tile foundation; concrete and wood floors; ventilators; T. J. Wood, Contr. (Lately noted.)

Ky., Arlington—School Board will erect building to replace burned structure; E. E. Campbell Co., Contr.

Miss., Batesville—School Board will remodel and erect addition to building; \$40,000; Graves Bros., Contrs.

Mo., Columbia—Alpha Phi Sorority of University of Missouri will erect \$30,000 chapter house; English style; Berry McAlester, Contr.

S. C., Charleston—Simons-Mayrant Co. has contract to erect alumni building at Citadel Military School; \$42,000; 2 stories; 90x129 ft.; steel, brick and concrete.

S. C., Clio—Trustees, School Dist. No. 9, H. J. Bennett, Chmn., will erect high school; \$45,000; 2 stories; 14 rooms; brick; wood floors; concrete foundation; tin or composition shingle roof; Willis Irvin, Archt., Lamar Bldg., Augusta, Ga.; W. P. Tennant, Contr., Florence, S. C.

Tex., Abilene—Board of Education will erect high school; \$136,300; 3 stories; 195.4x72.4 ft.; hardwood and concrete floors; Barrett roof; David S. Castle & Co., Archts., Radford Bldg., Abilene; Walsh & Burney, Contrs., San Antonio; S. P. Osborn, Fort Worth, heating and plumbing; Abilene Electric Constr. Co., lighting. (Lately noted.)

Tex., Beaumont—Board of Education will erect 2 junior high schools; \$226,976; 2 stories; fireproof; brick and tile; C. H. Page & Bro., Archts., Austin; A. Babin, Asso. Archt., Beaumont; J. J. Wattinger, Contr., Austin; Ed. Eastman, plumbing and heating, \$16,200 and \$23,200; Beaumont Electric Co., lighting, \$3274. (Lately noted.)

Tex., McKinney—School Board, L. A. Scott, Prest., will erect \$63,000 junior high school; 2 stories; brick, concrete and steel; concrete foundation; Sparger & Peters, Archts., Bonham; Robt. H. Brown, Contr., McKinney; A. C. Rogers, McKinney, plumbing and heating, \$10,000.

Tex., Memphis—School Board, C. W. Broom, Prest., will erect high school; \$84,273; Rittenbury & Kaufman, Archts., Amarillo; R. H. Whaley, Contr., Estelline. (Lately noted.)

Stores.

Fla., Lady Lake—C. H. Hoppers will erect store; contract let.

Ga., Macon—R. A. McCord will erect \$45,000 building; 3 stories; 150x50 ft.; built-

up composition roof; concrete foundation; wood floors; Happ & Shelverton, Archts.; R. H. Smalling's Sons, Contrs.; Opey Plumbing & Heating Co., heating; Morris Putzel, lighting and elevator; F. K. Duly Plumbing & Heating Co., plumbing.

Mo., St. Joseph—Tuttle Estate will erect \$200,000 building at 6th and Francis Sts. to replace burned structure; 4 stories; St. Joseph Structural Steel Co., Contr. for steel work; foundation to permit 3 additional stories.

N. C., Gastonia—Loflin & Co. will erect building for store, printery and offices; \$25,000; 2 stories and basement; 40x125 ft.; White, Streeter & Chamberlain, Archts.; Brown-Harry Co., Contrs.

N. C., Greensboro—Dr. L. M. Humphrey will erect \$25,000 building at Market and

Davie Sts.; 2 stories; brick; Lanning & Coe, Contrs.

Tex., Gonzales—Mrs. S. Joseph will erect store; 1 story; 24x74 ft.; wood floors; concrete foundation; tin roof; wire glass; M. A. Wade, Contr.

Warehouses.

N. C., Charlotte—Standard Bonded Warehouse Co., T. J. Davis, Prest., will erect 15 additional compartments; \$90,000; capacity 12,000 bales; Jones Construction Co., Contr.

Tex., Houston—James Furniture Co. will erect \$50,000 warehouse; Thos. M. Murray, Contr.

Tex., Houston—Anderson, Clayton & Co. will erect warehouses, compress, etc., on Houston ship channel; \$540,000; warehouses, 1700x190 ft.; J. B. Townsend, Contr.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Angle Irons (Steel)—Irving Williams, 1144 S. Owassa St., Tulsa, Okla.—Steel angle irons.

Apartment Facilities—Schooley-Murphy Co., P. O. Box 1229, St. Petersburg, Fla.—Murphy beds, furniture, gas ranges, etc., for 36 apartments.

Apartment Facilities—Irving Williams, 1144 S. Owassa St., Tulsa, Okla.—Apartment facilities.

Asphalt Plant—A. V. Wills & Sons, Contrs., Title Guaranty Bldg., St. Louis, Mo.—Small asphalt plant.

Barges.—U. S. Engr. Office, Galveston, Tex.—Bids until April 16 to furnish and deliver 1200 bbl. steel water barges.

Barrels, Staves, etc.—A. N. Evans (Dealer) Bishopville, S. C.—To correspond with mfrs. of and dealers in barrels, staves, hogsheds, etc.

Beams.—Guyan Machine Shops (Mchy. Dealers), Logan, W. Va.—10-in. I beam, 14-in. long, about 25 lbs.

Beds (In-a-door)—Irving Williams, 1144 S. Owassa St., Tulsa, Okla.—In-a-door beds.

Beds (Murphy)—Schooley-Murphy Co., P. O. Box 1229, St. Petersburg, Fla.—Murphy beds.—See Apartment Facilities.

Boiler.—DeVane-Hall Lumber Co., Huske Bldg., Fayetteville, N. C.—100 H. P. boiler.

Boiler.—Taylor-Parker Co. (Mchy. Dealers), Water St. and Commercial Place, Norfolk, Va.—50 H. P. portable boiler, either on or off wheels.

Boiler, etc.—Marshville Mfg Co., A. M. Stack, III, Secy.-Treas., Marshville, N. C.—Boiler, etc.

Boiler (Return Tubular)—Crawford Mill Supply Co., 438 Main St., Winston-Salem, N. C.—80 to 100 H. P. horizontal return-tubular boiler complete, good for 125 lbs. pressure.

Boilers, etc.—United States Engrs office, Florence, Ala.—Bids until April 27 to furnish and install 4 steam boilers with fittings, stacks, etc. on U. S. tow boat General John Coffee, at Florence.

Bricks.—Duval County Commrs., R. H. Carswell, Chmn., Jacksonville, Fla.—Bids until April 2 to furnish one car of No. 1 and No. 2 repressed paving brick, 3½x4x8½-in., delivery f. o. b. at Three Mile Spur, near S. A. L. railway shops.

Bridge Construction.—C. Perry Snell, St. Petersburg, Fla.—Names and addresses of bridge builders.

Bridge Construction.—Louisiana Highway Comsn., Raymond Bldg., Baton Rouge, La.—Bids until April 12 to build 3 bridge projects as follows: 303, Assumption Parish, over Canebrake Canal, on Napoleonville-Thibodaux

road, 4 mi. west of Napoleonville; 30-ft. steel I-Beam span; 114 lin. ft. timber trestle; 308, Sec. D, St. Landry Parish, over Catablau, on Opelousas, Marksville highway, at Washington; 95 lin. ft. timber trestle approaches, to existing steel bridge, 79, Sec. C, Livingston Parish, highway bridge over Tickfaw River, on Hammond-Baton Rouge highway; 100-ft. through riveted truss span on concrete piers with 38-ft. timber trestle approach at each end; plans, etc., on file; J. M. Fourmy, State Highway Engr.

Bridge Construction.—North Carolina—State Highway Comsn., Raleigh, N. C.—Bids until April 3 for 3 bridge projects as follows: 659, Cabarrus County, bridges and culverts on highway between Charlotte and Cabarrus County line; 804, Avery County, over Horse Shoe Creek, near Newland; 882-B, Rutherford County, overhead crossing on C. C. and O. R. R., near Forest City.

Building Material.—Barbourville Realty Co., Dr. John G. Tye, Prest., Barbourville, Ky.—Building material.

Building Material.—M. A. Long Co., 1523 Munsey Bldg., Baltimore, Md., is estimating on construction of Y. M. C. A. building, Cumberland, Md., and desires sub-bids and estimates until April 14.

Building Materials.—H. Marshall Gardiner, Dayton, Fla.—Roofing tile, small fluted and spiral columns, composition caps, cornice work and oak flooring.

Cableway.—D. C. Elphinstone (Mchy Dealer), 408 Continental Bldg., Baltimore, Md.—Cableway, 620 ft long, max. load to be carried 9 tons, average load 5 tons for steam hoist operation, good condition.

Canning Equipment.—Wm. Eager, Conslt. Engr., Valdosta, Ga.—Prices and catalogs on canning equipment for oyster and fisheries plant.

Cans (Tin).—A. J. Johns, care of Mitchell Printing Co., 115 W. Hargett St., Raleigh, N. C.—To contract for mfr. of 8-oz. tin cans, in quantities of 2500 or 5000.

Caps (Composition)—See Building Materials.

Church Furniture.—M. E. Church, South, Rev. L. D. York, Pastor, Matoaka, W. Va.—Seats and pulpit furniture for \$25,000 church.

Columns (Fluted and Spiral)—See Building Materials.

Conveying Equipment.—Wm. G. Eager, Conslt. Engr., Valdosta, Ga.—Prices and catalogs on conveying equipment for oyster and fisheries plant.

Crank (Detachable, Automobile)—Joe Tesoro, 1208 Austin St., Houston, Tex.—To contract for mfr. of detachable crank for a

Ford automobile, made of either steel or malleable iron.

Dredging.—U. S. Engineering Office, 329 Customhouse, New Orleans, La.—Bids until April 9 to dredge intercoastal waterway between Bayou Black and Bayou Terrebonne, La.

Dredging.—U. S. Engineer office, Baltimore, Md.—Bids until April 30 for dredging in Clairborne Harbor, Md.

Dredging Outfit.—Acme Sand Co., L. D. Wyll, Secy., Eustis, Fla.—Used 8-in. centrifugal dredging outfit.

Electric Light Plant, etc.—Board of Electric Light Trustees, Muscatine, Iowa—Bids until April 18 to construct municipal electric light plant, distribution system, sub station and white way; plans with Arthur L. Mullergreen, Consltg Engr., 555 Gates Bldg., Kansas City, Mo.

Electric Lighting System.—City of Cruger, Miss., W. J. Smith, Mayor—Bids until April 10 for furnishing materials, machinery and constructing complete electric lighting system; work includes power house, oil engines, generators, switchboard, transformers, electric line and street lighting system; plans, etc., from office of Kramer Engineering Co., Engrs., Magnolia, Miss., and at office of Mayor.

Electrical Wiring.—Louisiana State University, R. L. Himes, Secy., Bldg. Comm., Baton Rouge, La.—Bids until April 6 for electrical wiring and installation of engineering buildings, agricultural buildings, power house, etc.; plans and specifications at office Theo C. Link, Archt., fourth floor of Capitol.

Elevator (Electric).—Guyan Machine Shops (Mchy. Dealers), Logan, W. Va.—Electric driven elevator, about 1000 lbs. capacity, either freight or passenger for 3 story building, platform approx. 36x48-in., to be driven with 220 volt, 3 phase, 60 cycle motor.

Engine (Crude Oil).—Taylor-Parker Co. (Mchy. Dealers), Water St. and Commercial Place, Norfolk, Va.—Crude oil engine of about 150 H. P., direct connected to 3 phase, 60 cycle, 220 volts generator.

Engine (Gas)—See Pump.

Engine (Hoisting).—D. C. Elphinstone (Mchy. Dealer), 408 Continental Bldg., Baltimore, Md.—One 3-drum 9x10 hoisting engine.

Excavator.—Alfred J. Forschner Co. (Mchy. Dealer), Real Estate Trust Bldg., Philadelphia, Pa.—Dealers prices on used No. 4 Keystone excavator, equipped with A. S. M. E. boiler, immediate delivery.

Fertilizer Mixing Machinery.—Fort Smith

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Cotton Oil Co., Fort Smith, Ark.—Fertilizer mixing machinery, also probably plant for making acid phosphate.

Flooring (Oak)—See Building Materials.

Folders (Newspaper)—See Printing Equipment, etc.

Fuel Making Machinery.—Olof Ohlson, Route No. 1, Seaside, Oregon.—Mchy for making peat into fuel.

Furniture.—Schooley-Murphy Co., P. O. Box 1290, St. Petersburg, Fla.—Apartment furniture. See Apartment Facilities.

Generator.—Wilson-Hock Co (Mchy Dealers), City Point, Va.—200 K. W., 60-cycle, 2300 volt generator, not over 260 R. P. M.

Generators.—M. A. Wade, Gonzales, Texas.—Prices on generators.

Generators.—Crawford Mill Supply Co., 438 Main St., Winston-Salem, N. C.—One 200 to 300 K. W., A. C. generator, 220-550 or 2300 volts, also one 75 to 125 K W, A. C. generator, 220-250 or 2300 volts direct connected to steam engine, complete with exciter, switchboard and instruments, good condition.

Grain.—Looney Milling Co., Elsie Looney, Gen. Mgr., Williamson, W. Va.—Prices f. o. b. Williamson on grain for flour mill with output of 50 bbl. flour, 100 bu. meal, 150 bgs. cr. corn, 80 bags middlings.

Grinder (Tool).—See Machine Shop Equipment.

Heaters (Hot Water).—W. I. Thames, Supt. of Schools, Hattiesburg, Miss.—To correspond with mfrs. of Rudd Hot Water Heater and Pittsburgh Hot Water Heaters.

Hoist (Steam).—Louisiana Sand & Gravel Co., Monroe, La.—Two drum steam hoist without boiler, either new or second-hand; used to lower and raise the suction end of pipe and gravel pump.

Hammer (Steam Pile).—D. C. Elphinstone (Mchy. Dealer), 408 Continental Bldg., Baltimore, Md.—One No. 1 Vulcan steam pile hammer.

Heating Equipment.—Virginia Polytechnic Institute, Dr. Julian A. Burruss, Prest., Blacksburg, Va.—Bids until April 3 for improvements to heating equipment, etc.; plans and specifications at offices Prof. J. S. A. Johnson, First Academic Bldg., V. P. I., and Wiley & Wilson, Consult. Engrs., Lynchburg, Va.

Hull (Steel Towboat).—U. S. Engr. Office, Rock Island, Ill.—Bids until April 12 to furnish and deliver one steel hull for towboat Elinor.

Insulators.—See Power Transmission Line Equipment.

Iron Fence.—City of Vicksburg, Miss., J. J. Haynes, Mayor—Bids until April 2 to furnish and erect iron fence along city cemetery property; plans with City Engr.

Lathes.—See Machine Shop Equipment.

Levee Construction.—Mississippi Levee Comms., Greenville, Miss.—Bids open April 2 to construct 600,000 cu. yds. levee construction including 200,000 yds. for enlargement within corporate limits of Greenville and 400,000 yds. for new levee and dike enlargement at Catfish Point; J. S. Allen, Chf. Engr.

Line Poles.—See Power Transmission Line Equipment.

Locomotives.—Wilson-Hock Co. (Mchy. Dealers), City Point, Va.—8-ton gasoline locomotive 34½-in. gauge; also 8-ton saddle tank locomotive, 4 wheel, 34½-in. gauge.

Machine Shop Equipment.—Wilson-Hock Co. (Mchy Dealers), City Point, Va.—18 to 24-in. x 7 ft. lathe; 18 or 20-in shaper; small drill press suitable for repair shop use; slightly used equipment.

Machine Shop Equipment.—Duncan Machinery Co. (Mchy. Dealers), Box 265, Knoxville, Tenn.—Jobbers prices on new and rebuilt 14 to 16-in. swing by 8 ft. tool makers' lathe; 16 to 24-in. x 16-ft. bed engine lathe; 36-in. radial drill press; universal tool grinder; No. 3 milling machine; belt driven from line shaft.

Mechanical Filter Plant.—City of Richmond, Va., E. W. Trafford, Director of Public Utilities—Bids until April 18 for following contracts:

No. 1 includes 9500 cu. yds. reinforced concrete masonry and 13,000 cu. ft. of excavation for construction of 10 filter tanks, 2 coagulating basins and other appurtenant work.

No. 2, including 200 tons of cast iron pipe and specials, 60 gate valves and sluice gates, filter sand and gravel, filter equipment for 30,000,000 gal. filter plant; also include 6 electrically driven centrifugal pumps.

No. 3, including brick super structure for the plant, comprising 1-story filter building, 110x150 ft. and 2-story, 50x155 ft. baed house; specifications obtained at office of Public Utilities, City Hall or with Fuller & McClintock, Engrs., 170 Broadway, N. Y.

Milling Machine.—See Machine Shop Equipment.

Miscellaneous Supplies.—Panama Canal, A. L. Flint, Gen. Pur. Officer, Washington, D. C.—Bids until April 4 to furnish steel, sheet copper, brass, bronze, monel metal, steel wire, steel or iron chain, steel rivets, machine bolts, brass nuts, hasps, pipe fittings, black galvanized and brass, corrugated zinc roofing and ridge roll. Blanks and information (Cir. 2318) on application to Panama Canal; Asst. Pur. Agt. at Fort Mason, San Francisco, Cal.

Miscellaneous Supplies.—Butler's Commercial Intelligence Bureau, Monrovia, Liberia, W. C. A.—To represent mfrs. and exporters of all lines manufactured in the United States with exceptions of mchy. and engines.

Miscellaneous Supplies.—Eubollithwerke A-G, Olten den Switzerland—Prices on magnesite, calcined finely ground chloride of magnesium in iron drum, wood flower, earth colors, f. o. b. manufacturers station for use in America; also quotations on fertilizers, f. o. b. Amsterdam or Anvers.

Monument.—U. S. Engr. Office, Room 710, Army Bldg., 39 Whitehall St., New York.—Bids until April 18 to construct monument at Plattsburg, N. Y.

Motors.—M. A. Wade, Gonzales, Texas.—Prices on motors.

Motors (Electric).—L. W. Coker, Pamplico, S. C.—Electric motors for crate and box factory.

Oil Machinery.—Alfred J. Forschner Co. (Mchy. Dealer), Real Estate Trust Bldg., Philadelphia, Pa.—Dealers prices on No. 2 Disk and Eccentric Bessemer roller, pumping power or equivalent, immediate delivery.

Organ (Pipe).—M. E. Church, South, Rev. L. D. York, Pastor, Matoaka, W. Va.—Pipe Organ for \$25,000 church.

Painting, Etc.—City Comms., Huntington, W. Va.—Bids until April 5 for cleaning and painting Guyandotte bridge; A. R. Hunt, City Clk.

Painting, etc.—Treasury Dept., Supvg. Archt.'s Office, Washington, D. C.—Bids until April 4 for interior painting, finishing, etc. of buildings and structures as listed for U. S. Veterans Hospital, Perryville, Md.

Paving.—A. V. Willis & Son, Contrs., Title Guaranty Bldg., St. Louis, Mo.—To sublet approx. 10,000 sq. yds. of 2-in. as-

phalt pavement, located in Southeast Missouri, Dunklin County.

Paving.—Board of Comms., L. D. Newman, Commr. of Streets, Sewers, etc., Huntington, W. Va.—Bids until Apr. 10 to grade, recurb and repave Court St between 8th and 9th Sts., and 4th and 5th Aves.; also to grade, curb and pave 27th and 28th Sts. from Highlawn to 5th; 5th Ave. from 27th to 28th; 25th and 26th from Adams to Smith; Smith, from 25th to 26th; Washington from 22nd to 24th; 22nd from Adams to Washington and from 8th to 9th; Madison from 5th to 7th; 7th from 4th to Virginia Ave.; plans, etc. from A. B. Maupin, City Engr.

Paving.—City, A. M. Ake, Secy-Treas., Alexandria, La.—Bids until Apr. 20 to pave 7th St.; 15,300 sq. yds. vertical fibre brick paving on 5-in. concrete base; W. H. Sylvester, City Engr.

Paving.—Paving Comsn., A. B. Taylor, Chmn., Easley, S. C.—Bids until April 10 to pave and lay sidewalks on certain streets; 25,200 sq. yds. hard surface pavement; 17,700 lin. ft. combination curb and gutter; 4000 sq. yds. sidewalks; 8000 cu. yds. grading; plans, etc. from Town Clk. or Harwood Beebe, Engr., Spartanburg, S. C.

Paving.—Board of Awards, Wm. F. Broening, Prest., Baltimore, Md.—Bids until Apr. 4 to grade and pave with cement concrete certain alleys in Conts. Nos. 96 and 97; also to grade and pave with cement concrete certain footways in Conts. Nos. 42, 43 and 44; plans, etc. on file; A. E. Christhill, Ch. Engr.

Paving.—W. B. Williams, City Mgr., Sanford, Fla.—Bids until Apr. 23 to grade, drain and pave 11 streets totaling 44,513 sq. yds., including, 2nd, 3rd, Avocado, 5th, 9th, 13th, Central, Palmetto, Oak, Laurel; sheet asphalt, asphalt concrete, asphalt block and vitrified brick; plans, etc., on file or from Fred T. Williams, Engr.

Paving.—J. J. Hayes, Mayor, Vicksburg, Miss.—Bids until Apr. 2 to improve streets in City Cemetery; gravel or other suitable material; plans, etc., from City Engr.

Paving.—F. D. Perkins, Mayor, Harlan, Ky.—Bids until April 2 to improve following streets: Main St., reinforced concrete roadway; Bailey St. from Main to Harlan; Oak, from Harlan to Mountain View Ave.; Jones from Main to Harlan, reinforced concrete Kentucky rock asphalt, or bituminous macadam; 1st from Short to Central; Central from Main to 2nd; 2nd from Central to Court House alley; Court House alley, with reinforced concrete or Kentucky rock asphalt; plans, etc., on file or from Glazier & Morledge, Civil Engrs., 20-23 Miller Bldg., Cincinnati, Ohio.

Paving.—Litton Consolidated School Dist., Norman R. Allen, Attorney, Shaw, Miss.—Bids until April 3 to lay concrete walks and graveled driveways on grounds in Dist.; plans, etc., from J. H. Litton, Secy. of Board of Trustees.

Paving.—R. H. Garrett, Mayor, Dunbar, W. Va.—Bids until March 30 to grade, curb, pave, etc., 27,000 sq. yds. streets; plans, etc. on file. (Lately noted.)

Paving and Sewer Construction.—B. S. Jones, Mayor, Leaksville, N. C.—Bids until Apr. 5, to pave certain streets; 44,000 sq. yds. bitulithic, sheet asphalt or asphaltic concrete on 4 and 5-in. concrete base; 30,000 lin. ft. granite curb, straight; also 140 lin. ft. 3x3 ft. and 150 lin. ft. 6x6 ft. concrete culverts; 250 lin. ft. 180 in. storm sewer concrete pipe; 24 inlets, etc.; plans, etc.; on file, or from Res. Engr.; Webb & Cole, Engrs., Salisbury, N. C.

Paving—W. A. Graves, Mayor, Cloverdale, Ala.—Bids until Apr. 2 to grade, curb, gutter, drain and lay 21,000 sq. yds. sheet asphalt or bitulithic paving on concrete base; plans, etc. from Grover Keyton, City Clk., or Robt. L. Totten, Consult. Engr., 415 Brown-Marx Bldg., Birmingham, Ala.

Paving and Sewer Construction—H. L. Carroll, City Clk., Ashland, Ky.—Bids until April 4 to grade and pave with bituminous macadam, Kentucky rock asphalt or concrete following streets: Kentucky Ave. from Midland Trail to Cumberland Ave., Central Parkway, from Pollard and Oakview road to Midland Trail, Virginia Ave. from Kentucky to Cumberland, Ohio from Central Parkway to Cumberland, Cumberland from Ohio to Midland Trail, Maryland Court Circle; 12,560 sq. yds. paving; 12,470 lin. ft. curbs and gutters; 3 catch basins, 30-in. etc. and 5 manholes; 2572 lin. ft. 12, 15 and 18-in. sewer pipe; plans etc. from City Engr.

Paving and Sewer Construction—Clarence Ciapp, City Clk., Newton, N. C.—Bids until April 10 for paving and sewer construction as follows: 18,601 lin. ft. standard combined concrete curb and gutter; 25,000 sq. yds. concrete base course, and 25,000 sq. yds. sheet asphalt, bitulithic, rock asphalt or bituminous concrete surface course, or 30,000 sq. yds. one course plain cement concrete pavement with integral curb; 2400 lin. ft. 12, 15 and 24-in. D. S. T. C. storm sewers; 20 street inlets or catch basins; 3 manholes; plans, etc., on file or from Mees & Mees, Consult. Engrs., Charlotte, N. C.

Paving Equipment—Boyd A. Bennett, City Mgr., Charlottesville, Va.—Asphalt paving plant.

Paving Material—Boyd A. Bennett, City Mgr., Charlottesville, Va.—Asphalt, brick, cement, sand, slag and stone.

Pipe—Texas Supply Co., 2014 Lorraine St., Houston, Tex.—Pipe in quantity, any size.

Pipe (Cast Iron)—Battery Machinery Co. (Mchy. Dealers), Rome, Ga.—2000 ft. of 4 or 6-in. second-hand cast-iron pipe.

Pipe (Lock Seam) Machinery—J. G. Reitzel, care of High Point Machine Works, High Point, N. C.—Mchy. for making 2-in. plain square lock seam pipe about 24 gauge galvanized steel.

Polishing (Patch) Machine—Southland Marble & Granite Co., Marietta, Ga.—Patch polishing machine.

Power Transmission Line Equipment—M. A. Wade, Gonzales, Texas.—Prices on copper wire, aluminum wire, high tension insulators, line poles, and cross arm braces.

Press (Drill)—See Machine Shop Equipment.

Press (Drill), etc.—Gene Harrison, 1236 E. Douglas St., Wichita, Kan.—Drill press and electric drill.

Presses (Job)—See Printing Equipment, etc.

Printing Equipment, etc.—B. E. Archer, Florida City, Fla.—Prices and data on job presses, newspaper folders, perforators, paper cutters, stitching machines and other equipment.

Pump—Alfred J. Forschner Co., Real Estate Trust Bldg., Philadelphia, Pa.—One 4-in. diaphragm pump, gas engine, mounted on skids complete for a lift of 20 ft.; 30 ft. of hose with couplings, foot valve, etc.

Pump (Dredging)—U. S. Engr. Office, Jacksonville, Fla.—Bids until April 20 to furnish and deliver dredging pump for the U. S. dredge Barnard.

Ranges (Gas)—Schooley-Murphy Co., P.

O. Box 1299, St. Petersburg, Fla.—Gas ranges. See Apartment Facilities.

Refrigerating Outfit—Wilson-Hock Co. (Mchy. Dealers), City Point, Va.—Small refrigerating outfit, approx. 5 tons capacity.

Refrigerators—Irving Williams, 1144 S. Owassa St., Tulsa, Okla.—Refrigerators with outside icing doors.

Road and Bridge Construction—Montgomery County Road Trustees, W. B. Hicks, Chmn., Troy, N. C.—Bids until Apr. 6 to build 8.8 mi. top soil road from Esther to Saunders Store; also to construct two 12x70 ft. steel bridges across east and west prongs of Little River, reinforced concrete abutments; plans, etc. from L. V. Edwards, Consult. Engr., Winston-Salem; N. C., or L. A. Cooper, Res. Engr., Troy.

Road Construction—Durham County Comms., H. L. Carver, Chmn., Durham, N. C.—Bids until April 4 to improve New Hope Valley road, from corporate limits of Durham to junction with hard surfaced Chapel Hill road; 32,500 sq. yds. bituminous macadam, asphaltic concrete and cement concrete pavements; plans, etc., from J. D. Spinks, Engr., Winston-Salem, N. C.

Road Construction—Oktibbeha County, Highway Comms., Supvrs. Dist. No. 4, Starkville, Miss.—Bids until April 9 to build 8 mi. road through county; plans, etc., from Chancery Clk.

Road Construction—St. Charles County Court, St. Charles, Mo.—Bids until April 25 to build concrete road on Kings Highway; estimated cost, \$81,285.15. County to pay \$31,323.70, and property owners \$49,951.45.

Road Construction—Dyer County Pike Comsn., Dyersburg, Tenn.—Bids until April 5 to build 17 sections of roads, totaling 60 miles; plans, etc., from L. O. Brayton, Engr.

Road Construction—Lincoln County Court, Troy, Mo.—Bids until April 5 to hard surface highways in County.

Road Construction—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md.—Bids until Apr. 3 for 2 mi. concrete road along Urbana Pike, between Urbana and Montgomery County line, Frederick County, Cont. F-53; John N. Mackall, Chmn. (Late-ly incorrectly noted in Proposal Columns as 20 miles.)

Road Construction—Hillsborough County Comms., Chas. T. Friend, Chmn., Tampa, Fla.—Bids until March 30 to lay 22,000 sq. yds. Finley Method, Type A, surface treatment.

Road Construction—Madison County Comms., D. F. Burnett, Jr., Clk., Madison, Fla.—Bids until April 4 to lay sand-clay roadbed and otherwise improve 4 road projects as follows: No. 1, 28.25 mi., sand clay surfacing, 39,345 cu. yds.; Nos. 3-11, 12.94 mi. sand clay surfacing, 21,125 cu. yds.; No. 4, 13.43 mi., sand clay surfacing, 17,530 cu. yds.; No. 6, 5.95 mi. sand clay surfacing, 11,425 cu. yds.; plans, etc. from Chas. S. Wadsworth, County Engr.

Road Construction—State Road Dept., H. B. Phillips, Chmn., Tallahassee, Fla.—Bids until April 4 to place 22,000 gals. bituminous material on 9 mi. of Road No. 3, Volusia County, between Putnam County line and DeLeon Springs, Proj. 532.

Road Construction—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md.—Bids until April 10 to build 7 concrete roads as follows: Frederick County, 1.16 mi. from Emmitsburg west to Pennsylvania State line, Cont. F-63; Howard County, 1.45 mi. from end of Folly Quarter road to Triadelphia Pike, Cont. HO-23; Prince Georges County, .7 mi. between Laurel and Montgomery County line, Cont. P-44; Caroline County,

1.45 mi. from Hillsboro toward Denton, Cont. Co.-32; Dorchester County, 1 mi. between Cambridge and Lloyds, Cont. D-31; Somerset County, 3 mi. between Princess Anne and Deals Island, Cont. S-17; Queen Anne's County, 1.08 mi. between Chester and Kent Narrows, Cont. Q-25.

Road Construction—State Highway Comsn., Frank Page, Commr., Raleigh, N. C.—Bids until April 3 to grade, construct drainage structures and surface 3.54 mi. road between Patterson and Watauga County line, Caldwell County, Proj. 723; waterbound or penetration macadam; Chas. M. Upham, State Highway Engr., Raleigh. (Lately noted.)

Road Construction—Navarro County, A. P. Mays, County Judge, Corsicana, Tex.—Bids until Apr. 5 to improve section of S. H. No. 31; 34,066 sq. yds. concrete pavement; 76,075 lbs. reinforcing steel; plans, etc., from McLendon & Purnell, Engrs., Corsicana, or State Highway Dept. Austin, Tex.

Road Construction—Louisiana Highway Comsn., Raymond Bldg., Baton Rouge, La.—Bids until Apr. 10 to grade, etc., 2 sections of F. A. Proj. No. 127, as follows: Sec. A, Tangipahoa Parish, 8.834 mi. Hammond-New Orleans Highway, from point 1.16 mi. south of Ponchatoula to Pass Manchac; Sec. B, St. John The Baptist Parish, 13.173 mi. from Pass Manchac to Frontier; plans, etc. on file.

Road Construction—State Highway Comsn., Raleigh, N. C.—Bids until Apr. 3 for 23 roads projects as follows: 115, Chowan-Perquimans County, 11.83 mi. hard surface, between Edenton and Hertford, Route 342; 151-B, Hyde County, 4.39 mi. hard surface, from Swan Quarter to Rose Bay, Route 91; 146, Hertford-Bertie County, 6.42 mi. gravel, from Aulander to Northampton County line, Route 305; 213, Craven County, 10.43 mi. hard surface, on Central Highway, between Fort Barnwell and Jasper; 293, Wilson County, 9 mi. hard surface between Wilson and Greene County line, Route 91; 392, Robeson County, construct bridges and gravel surface 1.06 mi. from Bladen County line through Big Swamp, Route 211; 329, Columbus County, 12.89 mi. hard surface, between W. C. A. Highway and Wilmington.

457-A, Orange County, 7.45 mi. hard surface on Central Highway, between Hillsboro and Durham County line; 437, Harnett County, 10.74 mi. gravel, between Lillington and Duke, Route 60; 485-A, Wake County, 7.81 mi. hard surface, on National Highway, between Neuse River and Franklin County line; 408, Durham County, .47 mi. hard surface on Central Highway, near Durham; 578, Randolph County, 7.97 mi. hard surface, between Randleman and Asheboro, Route 70; 570, Moore County, 22.10 mi. gravel, between Aberdeen and Montgomery County line, Route 70; 643, Iredell County, 8.57 mi. hard surface on Central Highway, between Statesville and Rowan County line.

616, Cabarrus County, 8.50 mi. gravel on Cabarrus-Albemarle Highway in Cabarrus County; 713, Ashe County, 3.53 mi. hard surface between Jefferson and Orton, Route 17; 723, Caldwell County, 3.54 mi. penetration macadam, between Patterson and Watauga County line, Route 17; 802, Avery County, 5.67 mi. waterbound macadam, from Newland to Elk Park, Route 175; 835, Henderson County, 6.97 mi. hard surface on W. C. A. Highway, between Buncombe County line on west and Rutherford County line on east; 944, Haywood County, 11.66 mi. hard surface on Central Highway, from Waynesville to Canton; 971, Madison County, 6.74 mi. waterbound macadam, on Central Highway, between Hot Springs and Tennessee line; 930-A, Graham County, 2.92

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mi. penetration macadam road near Robbinsville; 961-A, Ext., Macon County, 8.27 mi. hard surface from end of Proj. 960 to Tennessee line. (Lately noted.)

Road Building Machinery—Buncombe County Comms., Court House, Asheville, N. C.—Bids opened March 26 to purchase the following: one or more 10 ton, one or more 5 ton caterpillar tractors, one or more 3½ ton truck.

Road Rollers, etc.—R. L. Beasley, Box 26, Gordon, Ala.—6 ton road rollers with scarifier and grader attachment and to include stump pulling drum; also stump pulling mchy.

Rollers (Steam)—D. C. Elphinstone (Mchy Dealers), 408 Continental Bldg., Baltimore, Md.—Two 10-ton 3-wheel steam rollers.

Sanitary Sewer System—City of Hazard, Ky., J. W. Craft, Mayor—Bids until April 10 for construction of sanitary sewer system; J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, Pa., Engrs.

Saw-mill Machinery—D. V. Richardson, Secy., Huntley—Richardson Lumber Co., Bucksport, S. C.—Saw mill mchy.

Saw Mill Outfit—Bennett Nooe, Allendale, S. C.—To saw mill outfits each consisting of saw mill, edger approx. 40 H. P. engine and boiler.

Sawmills, etc.—L. W. Coker, Pamplico, S. C.—Sawmills, etc. for crate and box factory.

Screening Plant—Alfred J. Forschner Co., Real Estate Trust Bldg., Philadelphia, Pa.—Rotary screen complete, screening from 3/8 to 1½ in. material for two grades of material, without elevator but including bins, operating chains, etc.; second-hand.

Seating—M. E. Church, South, Rev. L. D. York, Pastor, Matoaka, W. Va.—Seating for \$25,000 church. See Church Furniture.

Sewer Construction—Board of Directors of Jefferson Davis Soldiers Home, Beauvoir, Miss.—Bids until April 10 for installation of sewerage system and septic tank system; E. Tartt, Supt.

Shovel (Steam)—Alfred J. Forschner Co. (Mchy. Dealer), Real Estate Trust Bldg., Philadelphia, Pa.—Dealers prices on 1 Marion steam shovel, 1 yd. dipper, caterpillar tread, power steer, A. S. M. E. boiler, manganese steel teeth on dipper; immediate delivery.

Shovels (Steam)—Alfred J. Forschner Co., Real Estate Trust Bldg., Philadelphia, Pa.—Small shovel with ¼ yd. dipper to handle stone, largest of which will not exceed 18 in.; high lift steam shovel standard make, 5/8 or ¾ yd. dipper, caterpillar trucks, power steer, A. S. M. E. boiler, completely housed, manganese steel teeth; second-hand.

Show Cabinets—Herbert D. Mendenhall, Lakeland, Fla.—Plate glass show cabinets.

Spring Working Machinery—Standard Spring & Axle Co., 2816 Main St., Dallas Tex.—Prices on spring working mchy. and furnaces, especially gas and oil burners for furnaces.

Standpipe Construction—City of Kirkwood, Mo.—Bids until April 2 to furnish and erect corner Rose Hill and Andrews Aves., steel standpipe, 30 ft., diam., 100 ft. high on concrete foundation to be provided by city; C. E. Smith & Co., Const. Engrs., 2073 Railway Exchange, St. Louis, Mo.

Steel Filing Cases—Board of Awards, Richard Gwinn, Register, City Hall, Baltimore, Md.—Bids until April 4 for steel filing cases in Appeal Tax Court, City Hall; J. F. Crowther, Inspector of Buildings.

Steel Piling—M. A. Wade, Gonzales, Tex.—Prices on steel piling.

Stitching Machines—See Printing Equipment, etc.

Stone Chips—State Road Comsn., John N. Mackall, Chrmn., 601 Garrett Bldg., Baltimore, Md.—Bids until April 3 for hauling approx. 16,463 tons of stone chips in three Dist. as follows: Dist. 3—Montgomery and Prince George's Counties, 3245 tons; Dist. 5—Carroll, Howard, Frederick and Montgomery Counties, 8640 tons; Dist. 6—Alleghany, Frederick, Garrett and Washington Counties, 4578 tons.

Storm Sewer—City of Alexandria, La., V. M. Ake, Secy-Treas.—Bids until April 10 for furnishing all labor, material and construction of storm sewer on Seventh St.; consisting of approx. 4383 cu. yds. concrete, 389,700 lbs. reinforcing, 9000 cu. yds. excavation; W. H. Sylvester, City Engr.

Stump Pulling Machinery—R. L. Beasley, Box 26, Gordon, Ala.—Stump pulling mchy.

Tenoner—Carolina Piano Mfg. Co., Inc., 1313 English St., High Point, N. C.—Tenoner machine, immediate delivery.

Textile Plant—Dallas Textile Mills Co., J. Perry Burrus, Prest., Dallas, Tex.—Finishing plant for twills.

Tile (Roofing)—See Building Materials.

Tile—Temple Terraces, Inc., Tampa, Fla.—Data and prices on green tile for swimming pool, or tile generally.

Tower Tank—Wilson-Hock Co. (Mchy. Dealers), City Point, Va.—50,000 or 75,000 gal. tank with tower 50 to 75 ft. high.

Tractors—D. C. Elphinstone (Mchy Dealers), 408 Continental Bldg., Baltimore, Md.—Three 10-ton Holt tractors.

Traps (Rat)—R. P. Larbin, Statesville, N. C., Buffalo Shoals Road.—To contract for mfr. of rat traps.

Trimmer—DeVane-Hall Lumber Co., Huske Bldg., Fayetteville, N. C.—U. S. double end trimmer.

Veneer Machines—L. W. Coker, Pamplico, S. C.—Veneer machines for crate and box factory.

Water and Sewer Construction—Town Board of Aldermen, Davidson, N. C.—Bids until April 3 for following materials, including necessary pumping equipment; 200 tons of B. and S. Class B of 6-in. and 20 tons of B and S Class B 8-in. C. I. pipe; 10 tons of specials; 9000 lbs. pig lead; 15,000 ft. of 8-in. and 4000 ft. of 10-in. terra cotta sewer pipe; 3500 bbls. Portland cement; one 100,000 gals. elevated steel water tank; 15 gate valves and 40 fire hydrants; specifications at office of C. H. Hamilton, Mayor, and Mees & Mees, Const. Engrs., Charlotte, N. C.

Water Works and Electric Light Plant—City of Plaquemine, La., Fritz Wilbert, Mayor—Bids until April 17 for the following: 3 crude oil engines directly connected to alternators, motor driven centrifugal fire pumps, motor driven domestic service pumps, motor driven air compressors, switchboard, deep well 200,000 gal.; concrete reservoir, concrete foundations, cast iron pipe, hydrants, etc.; Swanson-McGraw, Inc. Engrs., New Orleans, La.

Wire (Copper and Aluminum)—See Power Transmission Line Equipment.

Woodworking Machinery—Wilson-Hock Co. (Mchy. Dealers), City Point, Va.—6 or 10 in. moulder; hand jointer; variety saw; large dove-tail machine; surfacer; glue jointer; all machines improved individual motor-driven type.

Financial News

New Financial Corporations.

Fla., Miami—Guarantee Title & Mortgage Co., Jacksonville, Fla., capital \$800,000, incptd with H. Jerome Carty, Prest.; G. E. Terbush, Secy.

Fla., Miami—Miami Holding Co., capital \$500,000, incptd. with E. P. Grimes, Prest.; W. R. Mecker, Secy-Treas.

Fla., Tampa—National Guaranty Co., capital \$50,000, incptd. with L. E. Cohn, Prest.; L. S. Augustine, Secy-Treas.

Ky., Louisville—Kentucky Mortgage Co. of Louisville, capital \$35,000, incptd. by J. J. Uhlen, Charles J. McCartin, John P. Fleming.

Ky., Madisonville—Madisonville Building & Loan Assn., capital \$1,000,000, incptd. with R. S. Dulin, Prest.; D. Utley, Vice-Prest.

Ky., Royalton—Bank of Royalton, capital \$15,000, incptd. by John W. Kitchen, L. N. Davis, W. E. Berger, James H. Kitchen and H. R. Dysard.

La., New Orleans—Union Indemnity Co., reorganized with additional capital of \$1,000,000; acquired the Louisiana Abstract and Title Guarantee Co.

Md., Baltimore—Lincoln Highway Permanent Building & Loan Assn., capital \$520,000, incptd. by Ralph P. Gilmore, Poplar Ave. near Oak St., Frank J. Koenig and J. F. Eirman.

Md., Baltimore—Middle Atlantic Lincoln Syndicate, Inc., 14 South Broadway, capital \$100,000, incptd. by Joseph L. Valentini, Francis C. Harrington and Alexander Goodman.

Md., Baltimore—Woodland Building & Loan Association, Inc., 449 Equitable Bldg., capital \$200,000, incptd. by Joseph Rabinowitz, Sol. Verman, Joseph Meyerhoff.

Mo., Jefferson City—Auto Loan Co., capital \$25,000, incptd. by J. N. Owens, F. H. Tanner, and others.

Mo., Kansas City—Atlas Industrial Corp., incptd. by H. A. Kresky, W. S. Palmer, C. J. Kaney.

Mo., Kansas City—Missouri Mortgage Loan Co., incptd. by A. W. Kavanaugh, V. A. Lau, Marion D. Waltner.

Mo., St. Louis—Geo. H. Burr & Co., Inc., capital \$50,000, incptd., by T. L. Crotheau, S. E. Dill and A. M. Hooven.

Mo., St. Louis—Levitt Corp., capital \$25,000, incptd. by I. M. Levitt, S. Levitt, Ida Levitt.

Mo., St. Louis—North American Investment Co., Inc., capital \$10,000, incptd. by Sam Rothberg, Harry Handler, Harry Rothberg, David Rothberg.

S. C., Greer—Greer Bank & Trust Co., capital \$10,000, incpt. with Emslie Nicholson Prest.; T. E. Smith, V. P.; A. R. Hawkins, Cashier; merger of Farmers Bank & Trust Co. and the Bank of Greer. (Lately noted.)

S. C., Marion—Marion Investment Co., capital \$10,000, incptd. with E. L. Miller, Prest.; Ben P. Richard, Secy.

S. C., Union—Nicholson Insurance Agency, capital \$10,000, incptd. with Emslie Nicholson Prest.; Ben T. Gibson, Secy-Treas.

Tenn., Memphis—The Universal Life Insurance Co., capital \$100,000, incptd. by J. E. Walker, J. T. Wilson, B. F. Booth and others.

Tex., Austin—Texas Building and Loan Assn., capital \$500,000, incptd. by J. T. Larue,

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

G. B. Connell, A. M. Barnes and others.

Tex., Houston—Central State Bank - of Magnolia Park, capital \$25,000, inceptd. it with S. D. Simpson, Prest.; R. S. Craig, cashier.

Tex., Llano—Moore State Bank of Llano, capital \$50,000, inceptd. with Miss Edna Moore, Prest.; W. J. Moore, cashier.

W. Va., Welsh—Tug River National Bank, Hill Motors Co.'s bldg., capital \$50,000, inceptd. with J. J. Huddleston, Prest.

New Securities.

Ala., Columbiana—Indebtedness — Shelby County will vote April 24 on \$350,000, 4½% to 5% bonds. Address County Commrs.

Ala., Gadsden—Paving—City sold \$10,000 bonds to J. C. Mayer & Co., Cincinnati for par and a premium of \$90, also accrued interest.

Ark., Marion—Road—Crittenden County commrs. will receive bids until April 2 for \$125,000, 5½% bonds of Road Dist. No. 4, at the office of L. C. Going, 1412 Exchange Bldg., Memphis, Tenn.

Fla., Bartow—Road—Polk County Commrs., contemplate election on \$3,000,000 bonds.

Fla., Crawfordville—Road — Wakulla County sold \$100,000, 6% bonds to Security Sales Co., Jacksonville, Fla., for \$107.25. Address County Commrs. (Lately noted.)

Fla., Green Cove Springs — Road and Bridge—Clay County Commrs., Special Road and Bridge Dist., No. 3, will receive bids until May 7 on \$35,000, 6% bonds; J. E. Taylor, Chmn.

Fla., Inverness—Highway—Citrus County voted \$750,000, 6% bonds. Address County Commrs.

Fla., Miami—Public Improvements—City voted \$2,730,000 bonds for public improvements. Frank H. Wharton, City Mgr. (Lately noted.)

Fla., Orlando—School—Orange County Special Tax School Dist., sold \$100,000 bonds. Address A. B. Johnson, Supt. of Public Instruction. (Lately noted.)

Fla., St. Augustine—Road—St. John's County Commrs., called election for April 24 on \$500,000 bonds.

Ga., Atlanta—City sold \$70,000, 5% bonds to the National City Co. of New York. Address The Mayor.

Ky., Ashland—Sewer—City will receive bids until April 2 for \$200,000 bonds. Address H. L. Carrol, City Clk.

Ky., Boonesville—Road—Owsley County voted \$75,000 bonds. Address County Commrs.

Ky., Catlettsburg—Paving—W. E. Grace, Clk., will receive bids until Apr. 2 for \$25,000, 6% bonds.

Ky., Providence—Water and Light—City sold \$65,000, 6% bonds to the Providence Citizens Bank & Trust Co. of Providence at a premium.

La., Baton Rouge—School—East Baton Rouge Parish, School Dist., No. 7, W. H. Perkins, Prest. School Bd. will receive bids until April 5 for \$50,000, 6% bonds.

La., Clinton—Road—East Feliciana Parish Road Dist. No. 1, sold \$150,000, 5% bonds to the Hibernia Securities Co., of New Orleans at premium. Address Parish Police Jury, (Lately noted.)

La., Delhi—School—Richland Parish will vote on \$150,000 bonds. Address School Board.

La., Mamou—Waterworks—City sold \$40,000 bonds to Caldwell & Co of Nashville. Address The Mayor.

La., Melville—Improvement—Town, J. W. Lafleur, Mayor, will receive bids until April 10 for \$45,000, 6% bonds.

La., Napoleon—Road—Assumption Parish Road Dist. No. 1, R. L. Baker, Prest. of the Police Jury, will receive bids until April 10 for \$80,000, 6%, \$500 denom. bonds.

La., Pointe a la Hachle—Road—Plaquemines Parish Police Jury, Road Dist. No. 1, G. V. Groleau, Secy., will receive bids until Apr. 10, for \$50,000 of 6%, \$1000 denomination bonds.

La., Ponchatoula — Sewer — Ponchatoula Sewer Dist. No. 1, E. D. Parker, Clk., will receive bids until April 13 for \$65,000 bonds.

La., West Monroe—Improvements—C. C. Bell, Mayor contemplates \$140,000 bond issue.

Miss., New Albany—School—Town plans voting on \$75,000 bonds. Address The Mayor.

Md., Denton—Road—Caroline County Commrs., Walter S. Rutter, Clk., opens bids March 27 for \$27,000, 5%, \$1000 bonds.

Md., Hagerstown—Sewer—City will receive bids until April 3 for \$450,000 bonds. Address The Mayor.

Miss., Aberdeen—School—City, J. M. Acker, Mayor, will receive bids until April 4 for \$125,000, 6%, \$1000 denom. bonds. (Lately noted.)

Miss., Belzoni—Public Improvements—City will vote in April on \$125,000 bonds for water and sewer. Address The Mayor.

Miss., Biloxi—Street, School, Parks, Library, etc.—City sold \$350,000 bonds to Marx and Co., of Birmingham. Address The Mayor. (Lately noted.)

Miss., Port Gibson—School—City contemplates voting on \$50,000 bonds. Address The Mayor.

Miss., Waynesboro—Mulberry School Dist., will receive bids until Apr. 16 for bonds. Address Board of Supvrs.

Mo., Alma—School—Alma voted \$28,000 bonds. Address The Mayor.

Mo., Centerview—School—Centerview Consolidated School Dist., voted \$20,000 bonds. Address Dist. Trustees.

Mo., Chillicothe—School—City voted \$300,000 school bonds; James R. Kers, Supt. of Schools. (Lately noted.)

Mo., Fair Play—School—Fair Play School Dist. sold \$30,000, 5% bonds to the Commerce Trust Co. of Kansas City. Address The Mayor. (Lately noted.)

Mo., Lathrop—Water and Sewer—City voted \$82,000 bonds. Address The Mayor. (Lately noted.)

Mo., Odessa—School—Odessa will vote April 3 on \$60,000 bonds. Address The Mayor.

Mo., Plattsburg—School—City voted \$38,500 school bonds. Address The Mayor.

N. C., Aberdeen—School—Aberdeen Graded School Dist. sold \$75,000 bonds to A. E. Aub & Co. of Cincinnati.

N. C., Fayetteville—Water and Sewer—City will sell \$350,000 bonds to A. B. Leach & Co., New York, Detroit Trust Co., Detroit, and the Mississippi Valley Trust Co., St. Louis. Address The Mayor.

N. C., Graham—Water—Town, R. G. Foster, Clk., will receive bids until April 2 for \$15,000, \$1000 denom. bonds.

N. C., Henderson—School—Henderson Graded School Dist., sold \$150,000 bonds to W. L. Slayton & Co., of Toledo. Address Dist. Trustees.

N. C., Lexington—Sidewalk, Sewer and Water—City sold \$225,000, 5% bonds to a Cincinnati firm.

N. C., Marion—Sewer and Water—City, H. H. Tate, Mayor, will receive bids until April 9 for \$100,000 bonds.

N. C., Mount Airy—Schools—City, A. V. West, Mayor, will vote April 10 on \$60,000 school bonds.

N. C., Newton—Street—Town, Clarence Clapp, Clk., will receive bids until April 6 for \$100,000 bonds.

N. C., Pittsboro—School—Pittsboro School Dist. sold \$50,000 bonds. Address Dist. Trustees. (Lately noted.)

N. C., Spruce Pine—Improvement—Town, W. W. Bailey, Clk., will receive bids until April 23 for \$75,000, 6% bonds.

N. C., Yadkinsville—School—Yadkin County School Dist. sold \$15,000 bonds to the Dixie Bond & Mortgage Co. of Yadkinsville at par.

Okla., Drumright—Road—Creek County, Tiger Township, voted \$300,000 bonds. Address County Commrs.

Okla., Fort Gibson—Sewer—City will vote April 3 on \$45,000, 6% bonds. Address The Mayor.

Okla., Monroe—Waterworks—City sold \$67,000, 6% bonds to C. Edgar Honneld, Geo. W. and J. E. Piersol & Co., of Oklahoma City. (Lately noted.)

Okla., Spiro—School—Spiro School Dist. sold \$26,000, 6% bonds to the First National Bank of Spiro at premium. Address Dist. Trustees.

S. C., Edgefield—Street—City will vote May 2 on \$30,000 bonds. Address The Mayor.

S. C., Lamar—Water and Sewer—Town E. H. Pate, Town Clk., receives bids until April 3 for \$35,000 water works and \$30,000 sewerage 6% bonds.

S. C., Marion—City sold \$100,000, 5% bonds to the Farmers & Merchants Bank of Marion at premium. Address George G. McKerral, Mayor.

S. C., Olanta—School—Olanta High School Dist. No. 21, sold \$25,000, 6% bonds to Hanchett Bond Co. of Chicago. Address Dist. Trustees.

Tenn., Athens—School—County will vote June 2 on \$235,000, 5½%, \$1000 denom. bonds. E. R. Singerfelt, County Supt. (Lately noted.)

Tenn., Franklin—Water Works—City, Park Marshall, Mayor; will receive bids until March 30 for \$25,000, 5½% bonds.

Tenn., Murfreesboro—Paving—City sold to J. W. Jakes & Co., Nashville, Tenn., \$21,000 bonds, at \$21.77. Address The Mayor. (Lately noted.)

Tenn., Ripley—Sewer and Street—City, J. B. Mitchell, Treas., will receive bids until April 9 for \$100,000, 5% bonds.

Tenn., Shelbyville—City sold \$20,000, 5% bonds to J. W. Jakes & Co., of Nashville. Address H. B. Cowan, Mayor.

Tex., Bellville—Road and Bridge—Austin County, Wallis Precinct, voted \$100,000 bonds. Address County Commrs.

Tex., Bowie—Water—City sold \$20,000, 5% bonds to Brown-Crummer Co. of Wichita, Kansas, at par and accrued interest. Address The Mayor.

Tex., Brownwood—School—City will vote either May 7 or May 12 on \$60,000, 5%, \$1000

denom. bonds. Address City Secy. (Lately noted.)

Tex., Cleburne—Road—Johnson County, O. B. McPherson, County Judge, will vote Apr. 14 on \$40,000 bonds.

Tex., Corpus Christi—Gas—City, Jno. T. Bartlett, Secy., will open bids March 23 for \$350,000, 5% bonds. (Lately noted.)

Tex., Farewell—School—Parmer County Common School Dist. No. 10 sold \$20,000 6% bonds to Crosby, McConnell & Co., of Denver. Address Dist. Trustees.

Tex., Fort Stockton—Water—Fort Stockton Water Improvement Dist. No. 1 will receive bids until April 15 for \$60,000, 6% bonds. Address Secy. Bd. of Directors.

Tex., Henrietta—Road—Clay County, J. F. Vaden, County Judge, voted \$575,000 bonds. (Lately noted.)

Tex., Iowa Park—School—City voted March 27 on \$60,000 bonds. Address Prest. Bd. of Trustees.

Tex., Jasper—Jasper County, Eugenia Swann, County Clk., sold to W. L. Slayton & Co., Toledo, Ohio, following road bonds: Dist. No. 1, \$150,000, of 5½%, \$1000 denomination, dated Feb. 10, 1923, at 97½; Dist. 2, \$125,000, of 5%, \$1000 denomination, dated Oct. 10, 1922, at 96. (Lately noted.)

Tex., McKinney—School—City sold \$100,000 bonds to A. T. Bell & Co. of Toledo, with premium of \$2120. Address The Mayor. (Lately noted.)

Tex., Muleshoe—School—Common School Dist. No. 4, Bailey County, sold \$10,000 bonds. Address County Supt. (Lately noted.)

Tex., Sulphur Springs—Waterworks—City will vote April 5 on \$40,000 bonds. Address The Mayor.

Tex., Tyler—School—City voted \$250,000 bonds. Address The Mayor. (Lately noted.)

Tex., Waco—City Hall—City will vote on bonds. Address Ben C. Richards, Mayor.

Tex., Wellington—School—Wellington Independent School Dist. will vote April 2 on \$55,000 bonds. Address Prest. Bd. of Trustees.

W. Va., Charleston—School—City will vote May 15 on \$1,350,000 bonds. Address Bd. of Education.

W. Va., Fairmont—Road—Marion County, Winfield Dist., voted \$200,000 bonds; Frank J. Wilfong, County Road Engr. (Lately noted.)

Financial Notes.

Commercial Bank of Newberry, Newberry, S. C., increased capital from \$50,000 to \$100,000.

The City National Bank, Dallas, Texas, will increase capital from \$1,500,000 to \$3,000,000.

Trade Literature.

A Fine Booklet on Steam Power.

"Steam Power" is the title of a booklet now being distributed by the J. G. White Engineering Corporation, 43 Exchange Place, New York. The book is illustrative and descriptive of some of the more important steam power plants which have been built by this Corporation. The pictures are unusually fine and distinct and the reading matter is adequate and interesting.

Sanitary Metal Partitions.

Catalog No. 5 of the Sanymetal Products Company, 980 East 64th St., Cleveland, Ohio, is devoted to description and illustration of "Sanymetal" partitions for toilet rooms, this being described as the sanitary metal partition for lavatories, dressing rooms, screens and shower baths, etc., in buildings where there are numbers of people. Features of this kind of partition work are noted, such as careful rust-proofing, tight joints, absence of corners and cracks to collect dust and dirt, slant lip molds, water shedding base shoes, etc. The book is full of fine pictures which convey many valuable suggestions for installations, showing various applications of these partitions.

Permanent Industrial Exposition.

The features of the Permanent Industrial Exposition at Newark, N. J., are attractively and accurately presented in a booklet which gives plans of the different floors of the building besides other illustrations. This exposition, it is stated, offers salesrooms and offices for all the year round use at a minimum rental, plus advertising, publicity, domestic trade and foreign trade service of value to manufacturers and other in extending their trade, this service being free of cost. The officers are Louis V. Aronson, president; Corbett McCarthy, vice president and treasurer; Alexander Harris, secretary; R. C. Estill, organization director; Arthur Oliver, publicity director.

Road Treating Machines and Appliances.

An exceedingly interesting publication is Bulletin A, March 1923, of the Kinney Manufacturing Co., Boston, Mass., containing fine pictures and complete descriptions of the Kinney line of machines and appliances for the treatment of roads and other highways with bituminous material, the proper application of which is of prime importance. It tells all about and illustrates heaters and distributors, asphalt and tar pumps, loading pumps, steam driven or gasoline driven; hand spraying pumps and nozzles, street flushers and street sprinklers, all made by this company, which has branches in seven leading cities. There is also another bulletin especially devoted to presenting the merits of the Kinney auto heater and distributor, this being likewise fully illustrated and containing a partial list of users of this equipment.

Fine Line of Road Building Machines.

A new catalog of road building equipment manufactured by the Blaw-Knox Company, Pittsburgh, Pa., is an unusually fine publication, containing many handsome pictures, some of them being full page illustrations of different types of the "Batcherplant" machines made by these builders for road construction, which has of late years become so important a feature of modern life. Accompanying the representation of all of this extensive line of equipment are complete descriptions so that customers may readily comprehend their advantages and thus make proper selections for their own particular line of work. The Blaw-Knox road forms are also adequately pictured and described and their strong and substantial characteristics are fully shown as in use on different highway jobs. Then there are the road turntables which have been found so useful for turning trucks, etc., on narrow roads in course of construction. The Universal forms, the clamshell buckets and the handy houses also manufactured by the company are similarly described and illustrated comprehensively.

High Speed Grinders.

The Wisconsin Electric Company, Incorporated, Racine, Wisconsin, have issued a large folder containing pictures and descriptions of their "Dumore" high speed grinders for the machine tool trade. These grinders operate on either direct or alternating electric current and it is remarked, they provide a spindle and speed for every need. Many of the illustrations show just how they look when in actual use.

Folder on Power Shovels.

Fairbanks shovel, Model K is particularly described, with pictures, in a new folder issued by the Fairbanks Steam Shovel Co., Marion, Ohio. These shovels are furnished with either steam, gasoline or electric power plants as desired. They are mounted on endless treads, one on each side of the machine, the flexibility of this mounting enabling them to travel over very soft ground without additional planking; they are also able to move over city streets with facility.

A Baltimore Business Directory.

The Merchants & Manufacturers Association of Baltimore, has issued a classified directory of Baltimore's industrial, commercial and financial establishments, giving full names and street addresses. There is also much other valuable information relating to general business, shipping, etc., in this little book of 144 pages, making it useful to manufacturers, merchants, and others. The manifold advantages of the city are accurately and definitely set forth and the contents are so arranged that reference to any particular line of trade is quick and easy.

Spiral Conveyor Folder.

An illustrated folder in two colors, describing and illustrating the different types of their spiral conveyors, has been issued by the Weller Manufacturing Company, 1820-1856 North Kostner Ave., Chicago, Ill. It is noted that the sectional flight conveyor is comparatively simple and inexpensive to repair, it being only necessary to cut off the rivet heads, remove the damaged flights, and replace them with new ones, flights being made interchangeable. Special conveyors are made for handling acid materials, ashes, abrasive materials, etc., which would destroy the usual steel flights. The company also issues a catalog.

Spiral Riveted Pressure Pipe.

Carrying a front cover page picture in colors showing Taylor's spiral riveted pressure pipe in actual use Catalog No. 22 of the American Spiral Pipe Works, Chicago, Ill., is an unusually handsome publication. This is an up to date issue covering its field fully but concisely. The first several pages carry a short description of the method of producing this pipe which has for many years been used for exhaust steam purposes as well as extensively employed on high pressure hydro-electric installations. These are succeeded by illustrations of the most notable installations for the last twenty years showing the best practice in pipe line construction. Price lists are given in logical order and there are also several pages devoted to valuable hydraulic tables and charts. Besides dealing with spiral riveted pipe, in which the company has specialized for 22 years, the catalog also refers to some of their more recently developed lines such as forged steel flanges, large diameter forge welded pipe, corrugated steel furnaces, etc.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers, or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily from non-advertisers as from advertisers.

Promoted to a Vice Presidency.

Clifford F. Messenger, who for the last three years has been general sales manager of the Chain Belt Company, Milwaukee, Wis., has been elected second vice president, according to an official announcement just made. Besides being a director of the company he is a director of the Interstate Drop Forge Company, also of Milwaukee.

Branch Established South.

The Philadelphia Belting Company, Philadelphia, Pa., one of the oldest and largest manufacturers of leather belting in the United States, have established a branch at High Point, N. C., with Edwin J. Payne, formerly of Baltimore, who is well known throughout the Carolinas, in charge thereof. The branch is fully equipped to render service, the repair department being under the charge of a factory expert. The entire South is, to be served from this branch which is situated in the Hotel Arthur building.

In Their New Offices.

The Walter A. Zelnicker Supply Co., of St. Louis, are now located in their new offices in the Chamber of Commerce Building, 511 Locust St., to which they removed on March 1 from their old location at No. 325 on the same street, where they were for the last twenty years. The main plant and yards of this company in East St. Louis now occupy 14 acres of ground for the long line of products which they handle including locomotives, cars, rails, track accessories, steel sheet piling, machinery, contractors equipment, pipe, storage tanks and many other iron and steel products.

In New Business Connection.

Paul A. Collins, formerly Washington representative of the Automatic Electric Co., has been appointed Assistant Manager of the P. A. X. department of the North Electric Manufacturing Co., Galion, Ohio, manufacturers of private automatic exchanges for inter-office communication and of machine switching systems for city telephone exchanges. He has had a broad experience in the telephone business, which he entered in 1902 from the School of Applied Science, Harvard University. During the war he was telephone and telegraph traffic officer in the American Expeditionary Forces.

Warehouse, Service, Garage, and Office Building.

The General Electric Company will erect in Detroit a five story concrete building costing approximately \$250,000 which will be used for warehouse purposes, service shop and garage, besides housing the Detroit local office. It will be situated at the corner of Antoinette St. and Third Ave., facing 100 feet on the former and extending back 180 feet on the latter thoroughfare. About 40,000 square feet of floor space will be used for warehouse purposes. On the roof will be a tower containing a water tank. This will be 22 feet in the clear and 78 feet high making the top about 160 feet above the sidewalk. It will be flood lighted at night making the building visible from a considerable distance. Work on the building, which will have direct railroad connection, will begin about April 15; it is expected to be finished about September 1. This is the second building of this type for the General Electric Co.; the first is now nearing completion in Atlanta, Ga.

General Manager Named—Reorganization.

Julius A. Schachner, of Charlotte, N. C., has accepted the general managership of the Moloney Belting Co., of Chicago, and has assumed the duties thereof. This company is one of the oldest and largest manufacturers of leather belting in the West. Mr. Schachner has been in the leather belting industry for 26 years, for the past three years being in charge of the McLeod Leather & Belting Co., of Greensboro, N. C., and before that he was with the Charlotte Belting Co., Charlotte, N. C., for 15 years, holding the position of vice president and general manager. The Moloney Belting Co. has just effected a reorganization which includes the opening of a new branch store in Atlanta, Ga., under the charge of A. E. Anderson, and Daniel Edwards has been promoted to manager of the New Orleans branch. The other officers of the company at present are David R. Lewis, president; C. A. Banks, assistant to the president; C. M. Mortimer, secretary, and E. F. Grahmann, acting treasurer.

Large Offering of Realty Bonds.

The Palatka Development Company, Palatka, Florida, which has done a great deal already for the upbuilding of that city, plans to do even more, and it is now offering, according to an official announcement which appears elsewhere in this issue, \$100,000 of its first mortgage, 7 per cent bonds, the proceeds of which are to be used for advancing the development plans of the corporation, giving it additional working capital to expand. It is remarked, in connection with this offering, that the company has already built or reconstructed 55 comfortable houses, mostly of the bungalow type, which were sold on an easy payment plan. At present it is developing Parkview, described as a fine residential section of Palatka and opposite the proposed city park. Dr. L. W. Warren is president, H. O. Hamm, vice-president; W. W. Tilghman, secretary; L. K. Tucker, treasurer. The bonds, which are dated February 15, 1923, mature in series in from four to fifteen years. Further particulars will be found in the announcement.

Bought Steel Plant at Cincinnati.

Joseph T. Ryerson & Son, Inc., with main plant and offices in Chicago, have purchased the plant, stock and good will of the Cincinnati Iron & Steel Co., Cincinnati, Ohio. The Ryerson Company will now have six steel service plants at Chicago, St. Louis, Detroit, Buffalo, New York and Cincinnati, respectively. The Cincinnati plant occupies a full city block at Front and Fremont streets, with about 110,000 feet of floor space. The stock is well assorted and contains all iron and steel products, including bars, shapes, plates, sheets, tubes, rivets, bolts, nuts, pipe, etc. Cutting and handling facilities will be improved to make possible a twenty-four hour shipping schedule. The plant is well located for all shipments including out of town orders, being on the Baltimore & Ohio railroad. Lewis E. Skinner, well known in steel circles through eighteen years connection with the Ryerson company, now has charge of the plant. He will be assisted by C. A. Parnell, formerly assistant at the Buffalo plant.

Consolidation of Offices.

The Sprague Electric Works of the General Electric Company, according to announcement will on April 1 consolidate their district and local offices with the corresponding offices of the General Electric Co. The manufacture and exploitation of Sprague products will be continued in the name of the General Electric Co. in their recently organized merchandise department. The Sprague conduit products section and the Sprague apparatus section of the merchandise department will, for the present, continue to have offices at 527 West 34th St., New York.

Cargo of Fir Doors from the Pacific Coast.

One of the largest consignments of fir doors ever received at Baltimore arrived recently for the Morgan Millwork Company of this city. It came in on the steamer A. L. Kent, which has carried a number of cargoes of lumber from Everett, Washington, to the large depot of the Weyerhaeuser Timber Co., Curtis Bay, Baltimore. The shipment was to have included 16,000 doors, but several of them had to be left behind and yet the order is considered a record one. Besides, it shows that the demand for such products has extended from the factories of the East and the Middle West to Pacific Coast plants.

Important Industrial Deal in Atlanta.

One of the most interesting and important deals lately announced is the acquisition of plant and other properties formerly owned by the Pratt Engineering & Machine Co., of Atlanta, by the Chemical Engineering & Foundry Co., a Georgia corporation. This plant one of the largest and best of its kind in the South, comprises gray iron and brass foundry, machine, pattern, and forge shops, power house, test house, storage houses, etc., and it is fully comparable with the best in the East. The products, known throughout the world wherever manufacture of fertilizers and of sugar are conducted, will thus continue to make widely known its name and the name of the city. Besides continuing to manufacture and expand the standard sulphuric acid, acid phosphate, complete fertilizer, and sugar cane crushing and grinding machinery lines, the new company will also make other products for which the plant is ideal, including special castings, and special machines of all kinds, for either simple or intricate repair work. The machine shop is completely equipped with modern tools large and small, the large vertical boring mill being able to swing a casting 16 feet in diameter and over 7 feet high. There are facilities to handle single castings weighing from a few pounds up to 70 tons and with its staff of mechanical, chemical and structural engineers, the company is in position to meet all requirements. The directorate is headed by Joel Hurt, Jr., the other directors being also of Atlanta, and the experienced official personnel is reinforced by a number of former department heads and other important men of the Pratt Engineering & Machine Co. with years of experience. E. Josephs, formerly treasurer of the Pratt organization, is president and treasurer; and John C. Moor, the former Atlanta sales manager, is secretary; he will handle sales of fertilizer and chemical machinery and the advertising thereof in the South. F. H. Gardner continues as chief engineer and J. V. Davis, formerly assistant superintendent and chief estimator, is now superintendent of production. D. L. Pollock, former superintendent of production, is now sales engineer, handling castings and special machinery and advising on shop production. Sales representatives are to be appointed in New York and Chicago as well as in Cuba and other countries.

Greater Facilities for Increased Sales.

To care for their increased transformer business the General Electric Co. have announced that arrangements have been made with their Erie works to make transformers of the same type as those built at the Pittsfield, Mass. works, and it is expected that production will begin in April. These transformers built at Erie will average in sizes from 1000 KW to 5000 KW in capacity and for voltages as high as 66,000 volts.

Personal Service Corporation.

The Industrial Management Corporation is a new organization for financing and industrial management which has been established at 405 St. Paul Place, Baltimore, Md. This, it is stated, is a personal service corporation which includes four engineers, one accountant and auditor and one attorney at law. It also comprises in its officers, directors and advisory council ten men successful in various lines of business. A little book of pocket size describes the functions of the company in detail along the lines indicated by its title. Norman Alan Hill is chairman of the board of directors, Malcolm W. Hill, president; Roy T. Watts, vice president; John D. Edwards, secretary; and J. A. O. Tucker, treasurer. The Messrs. Hill and Watts, together with Walter Finney and W. W. Varney, form the board.

New Officers and Trebled Capital.

The new officers of the Tips Engine Works, Austin, Tex., (formerly Tips Foundry & Machine Co.), the name having been recently changed as previously noted in these columns, are Ralph C. Goeth, president and general manager, who is a graduate of the Massachusetts Institute of Technology; A. C. Goeth and Eugene Tips, vice presidents; Mrs. Chas. W. Gardner, secretary; and Chas. C. Smith, superintendent; the other directors being Chas. Thomas and J. O. Creighton. The company reports greatly increased oil engine business since the intro-

duction of their new Type J semi-Diesel engines, which were designed and perfected by the late Chas. W. Gardner, who for years was the managing officer of the company. At the annual meeting at which the officers were elected the capital was trebled and the business is almost entirely directed to building Tips oil engines, hence the change of name.

Improved Flange Pipe Couplings.

The D. Souter Manufacturing Co., Inc., Baton Rouge, La., have made arrangements with the Istrouma Foundry & Machine Co., Inc., also of that city to manufacture the Souter improved flange pipe couplings, and the first named company will soon open an office in New Orleans to handle their sales. This coupling, which as its name indicates is of the flange type, does not have bolt holes in the flanges and this feature allows of a solid surface for the gasket. Besides, it permits the flanges to be put together in any position, as the bolts are attached to the outside of them. Furthermore, as many bolts can be attached as may be necessary to withstand any pressure to which the coupling may be subjected. Standard sized bolts are employed in connection with the company's new bolt clamps. A rigid leak-proof joint can be assured. The couplings will be made in all sizes of cast iron, brass and semi-steel.

Big Demand for Brick—Some New Colors.

"Building operations throughout the South, especially in Alabama and adjacent states, are at the highest peak since the war," said John W. Sibley, manager of the Birmingham Clay Products Co., recently, "the only 'fly in the ointment' being the car shortage, which is becoming more acute as business increases." This company about a year ago put on the market a new rough texture brick, naming it "Radio" because of its radiating colors; it has become very popular. Recently they have developed a "royal purple" color brick, that has been named "Tut-tex" because of

its reproduction of clay effects which were accomplished in the reign of the ancient Egyptian King Tutankhamen, whose tomb was recently opened. Another brick recently produced by this company will be named "Luxor Matt" because it is of gold matt hue. Mr. Sibley further said that 1923 promises to be a banner year for the use of brick.

Containers for Sundry Purposes.

An interesting and important line of containers for handling and shipping fruits and vegetables is that manufactured by the Southern Box & Basket Co., Macon, Ga., which includes the bushel baskets and four-quart tins, that are now being turned out in full force for the coming crops, this being the main line of products. The company also manufactures all other kinds of vegetable and fruit packages, wooden boxes for various purposes, for canneries and cotton mills and other establishments requiring boxes, making them to meet requirements. The company furthermore operates a regular roofers mill, planing rough roads. Francis Herring is president and treasurer; C. C. Humphrey, vice president and general manager, and R. L. Crandell, secretary.

American Locomotives for Siam.

Consul E. E. Brodie, Bangkok, Siam, noting the purchase of four locomotives from an American manufacturer, and two from a British concern by the Siamese State Railways, these purchases being over and above a contract for ten engines awarded to a French manufacturer, says that this marks the introduction into Siam of the first American railway equipment of the kind, and that at present only British and German locomotives are in use on the railroads there. American exporters are at a disadvantage in competing for sales of heavy railway equipment in Siam on account of the necessarily heavier freight rates in comparison to the rates from Europe, especially as there is no direct steamship service to Bangkok from America.

Valuable Transportation Facts.

The car service division of the American Railway Association has issued its annual bulletin for 1922, this being, to quote the announcement, "a statistical digest of related economic and transportation factors applied to the movement of the country's production during the year 1922, and prior years. A careful analysis of the trend of transportation forces, production, prices and shipments has been made to serve as a background of business and railroad conditions subsequent to the war period, and to give individual railroads and shippers a competent guide, statistical reference and index to industrial and agricultural activity, together with the performance of railway transportation during 1922." The bulletin will be found valuable by everyone dealing with transportation, manufacturing, agricultural and commercial statistics. It contains an abundance of comprehensive information.

Bids Invited for Two Sections of Louisiana Roads.

Baton Rouge, La.—The Louisiana Highway Commission of which W. T. Peterman is chairman, plans the construction of 2 sections of highway in Tangipahoa and St. John The Baptist parishes, and will receive construction bids until April 10. The first section involves 8.834 miles from a point near Ponchatoula to Pass Manchac, while the second section covers 13.173 miles from Pass Manchac to Frenier, both located on the Hammond-New Orleans Highway.

J. M. Fourmy is the State Highway Engineer, with offices in this city.

Railway Plan for the "Lost Provinces."

Raleigh, N. C.—At the recent session of the legislature the proposition to connect by railways the northwestern mountain counties with the rest of the state, was acted on and this carries \$10,000,000 if necessary. It is "to reclaim the counties without railway facilities by authorizing the completion of a railway which, in connection with existing ones, will complete a trunk line from North Carolina for the transportation of freight and passengers, connecting the middle west and the coal fields with the other parts of North Carolina; and also to complete certain railways in this state in which the latter has a pecuniary interest." These railways in the latter class go to the foot of the Blue Ridge on the south side, but there end. So the traffic pours out of a group of rich, cattle-raising, hay and cheese-making counties over into Virginia and Tennessee.

Construction Progressing on the Kentucky-Virginia Highway.

Whitesburg, Ky.—The last section of the Kentucky-Virginia highway is being completed through this county. It starts at Pound Gap, on the Virginia state line and runs to Lexington, passing through Whitesburg, Hazard, Jackson, Beattyville, Irvine and Winchester. It will be 200 miles long, and connect the Elkhorn-Hazard coal fields and the Virginia border with the Blue Grass Country. The terminus is Lexington and the road is to be completed by the end of 1924.



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Caterpillars make a truck more powerful because they furnish sure traction and prevent waste of power through slipping wheels.

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Caterpillars cost less per tire than pneumatics and less per mile than ordinary solid tires.

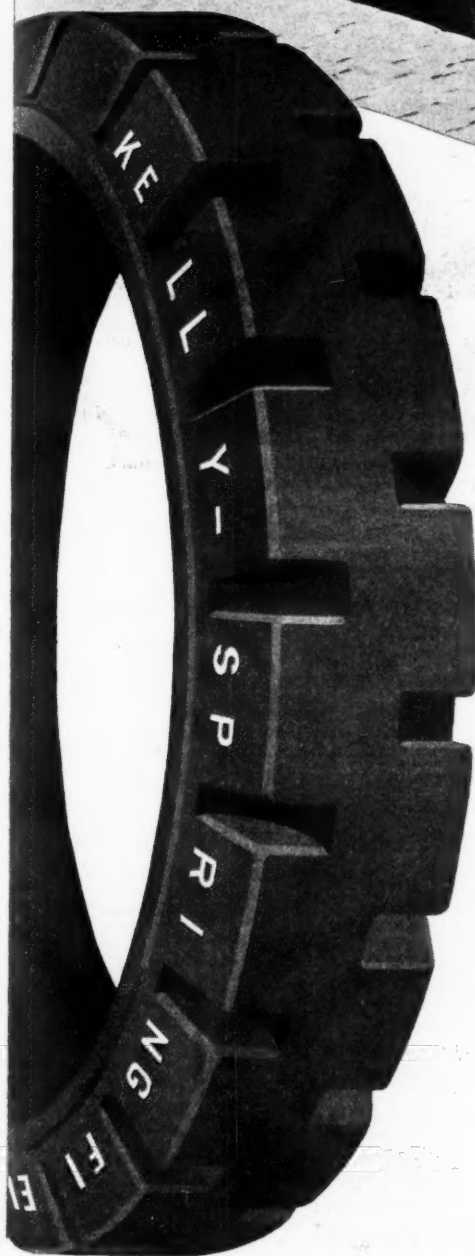
So whether you want to improve the efficiency of your trucks, or merely to reduce your tire costs, you can accomplish your purpose by equipping your trucks with Caterpillars.

There is no Caterpillar Tire but the one that Kelly makes

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Wehr Company,
Milwaukee, Wis.

Gentlemen:

We are enclosing our order No. 3983, for six Road Maintainers. These are to be shipped by freight at your earliest convenience. We anticipate a very good Road Maintainer business this year. Thanking you for your attention to this matter, we are

Yours respectfully,

MONARCH AUTO COMPANY
Louisville, Ky.

Wehr Company,
Milwaukee, Wis.

Gentlemen:

We have just closed the sale with the City of Murray for one Fordson equipped with Wehr Road Maintainer.

It is wonderful the way you can maintain streets with this outfit.

ANY TOWN WILL BUY ONE OR MORE
IF YOU WILL ONLY SHOW THEM WHAT
IT WILL DO.

We are going to sell the County 4 or more.

Yours truly,

E. J. BEALE MOTOR CO.
Murray, Kentucky

The WEHR Road Maintainer

The Wehr Road Maintainer combined with the Fordson Tractor is a real solution of good roads at low cost. The Wehr Maintainer is designed specially for the Fordson Tractor, so that the Tractor and Maintainer combined make a one man outfit, low in price and upkeep, yet doubling the efficiency over the ordinary methods.

When the Fordson Tractor and the Wehr Maintainer are combined you have an up-to-the-minute road patrol—a one man outfit—a machine that will maintain the highway in better condition at lower cost than any other machine or method on the market.

The operator has complete control of the cutting blade which he can raise or lower by means of a worm gear with steel cable. Tractor can be turned in same radius with maintainer as without. Can be backed up. This means quicker and better work on the road.

In operation the cutting blade and smoothing blade cut and level an 8 foot strip of road at the regular speed of the tractor. Just think what this means in the actual capacity of this machine over the old fashioned horse-drawn Planer or Road Drag.

Easy to attach. No holes to drill. Attached to Tractor by two bolts to the draw bar and one to the radius rod.

Write today for interesting literature and dealers proposition.

The WEHR Company
573 Thirtieth Street Milwaukee, Wis.

Book Review.

The Constitution of the United States.

(by James M. Beck, LL.D. New York: George H. Doran Company. pp. 280. \$2.)

Busy men and others whose education lacked study of the Constitution will find in this volume of modest dimensions the means of obtaining briefly and lucidly an adequate knowledge of the fundamental law of this land. The book is composed of three lectures delivered last summer in London by Mr. Beck, the Solicitor General of the United States, by invitation and under the auspices of the University of London in the hall of Gray's Inn, of which the author is an honorary bencher, the whole being introduced by a preface from the pen of Arthur J. Balfour, (Earl Balfour), and an introduction by Sir John Simon, K. C., as well as a personal introduction by Mr. Beck himself. The lectures give concisely and in most interesting vein a study of the genesis, formulation and political philosophy of our Constitution, the entire series shedding much light upon the reasons for this and that of its provisions and withal impressing upon the reader the need for standing by as closely as possible to the great charter of our liberties which was—as Mr. Beck shows—the subject of long, deep and thorough consideration and action by its framers. Those who would sweep aside as sources of delay certain restrictions imposed by the Constitution upon governmental and legislative actions will, after reading the volume, respect and appreciate the wisdom of the fathers of our system of Government all the more deeply and also regard with jealous care, which they probably never before experienced, its checks and balances that are so plainly demonstrated to have been prepared with wise concern for the welfare of the generations that were to follow in the years succeeding the preparation of the epoch-making document. In a fourth chapter to the book Mr. Beck considers and discusses the present revolt against authority, evidences of which are to be seen daily on every hand, and largely resulting from impatience, hasty or careless thought, and failure to heed the basic principles presented in the Ten Commandments. Quoting from the Book of Proverbs Mr. Beck says that the familiar words: "Where there is no vision, the people perish, but he that keepeth the law, happy is he," was translated erroneously and that what Solomon actually said was "Where

there is no vision, the people cast off restraint," etc. The vision he goes on to explain is the authority of law and he urges that the mandates of the Constitution be written upon our hearts. He finds the prospect serious but he has faith in the divine spark in the human soul, so plainly made manifest in various ways during the recent great war, to find a way out of all the difficulties and dangers which threaten. The Articles of Confederation, under which the Colonies conducted their relations prior to the adoption of the Constitution, as well as the Constitution itself, are included in the volume and will be found useful for reference.

Cost Accounting Procedure. By William B. Castenholz, A. B., C. P. A. Chicago: La Salle Extension University, 1922. Pp. 335. \$3.50.

That accurate cost accounting of is of the highest importance to manufacturers and merchants goes without saying, although there are many men engaged in extensive business operations who do not take sufficient pains to discover actual costs. Yet it must be acknowledged that with increase of competition and consequent necessity of careful economy in all business operations, there is now more interest displayed concerning cost accounting than ever before. It is not only analysis of figures and conditions that is desired but constructive ideas of the sources of waste or of efficiency. Therefore, the facts presented in this work must of necessity be of more than ordinary value to business men whether they are operating merely on their own account or as members of corporations. Mr. Castenholz, the author of this volume gives in it a coherent and logical presentation of the production-order plan from beginning to end, accompanying the narrative with abundant practical illustrations and examples. The language of the book is not of a technical nature and it thus constitutes an especially interesting and useful exposition of approved practice in cost analysis. He is particularly well qualified to write a work of this kind for, as the head of a firm of practicing public accountants and also as director of the Department of Higher Accountancy in La Salle Extension University, he possesses a broad knowledge of his subject and has thus naturally developed an attractive method of presenting the facts relating to it. The volume contains numerous tables besides inset charts and diagrams all of which will be appreciated by accountants and others. The book is finely printed upon substantial paper and is strongly bound in blue cloth.

PROPOSALS

Continued from Page 118.

Bids close April 3, 1923.

U. S. ENGINEER Office, Jacksonville, Fla.—sealed proposals will be received here until 12 M., April 3, 1923, and then opened for dredging and rock removal in Tampa Harbor, Fla. Further information on application.

Bids close April 7, 1923.

U. S. ENGINEER OFFICE, Drawer 421, Vicksburg, Miss. Sealed proposals will be received here until noon, April 7, 1923, and then opened for furnishing and delivering about 467,000 pounds of structural metal for locks and dams Nos. 5 and 8, Ouachita River, La. and Ark., and for erecting four steel gates at No. 5 and modifying two steel lock gates at No. 8. Information on application.

Bids close April 20, 1923.

U. S. ENGINEER OFFICE, JACKSONVILLE, FLA.—Sealed proposals will be received here until 12 m., Apr. 20, 1923, and then opened for furnishing and delivering Dredging Pump for the U. S. dredge BARNARD. Further information on application.

Bids close April 23, 1923.

\$75,000 6% 30-Year Bonds

Galax, Va. Sealed bids will be received until 11 A. M. on the 23rd day of April, 1923, at the office of City Manager of Galax, Va. for \$75,000.00, 6% 30 year bonds, \$50,000.00 permanent street improvement bonds and \$25,000.00 water and sewer bonds.

Coupon bonds to be dated May 1st, 1923 and mature May 1st, 1953, interest payable semi-annually May 1st and Nov. 1st. The right to reject any or all bids is reserved.

For further information apply to I. G. VASS, City Manager.

Bids close April 3, 1923.

\$65,000 6% Water and Sewer Bonds

Lamar, S. C. Notice is hereby given that the following Bonds of the Town of Lamar, County of Darlington and State of South Carolina will be sold by the Intendant and Wardens of said Town on the 3rd day of April, 1923.

Water-works Bonds to the amount of Thirty-Five Thousand (\$35,000.00) Dollars. Sewerage Bonds to the amount of Thirty Thousand (\$30,000.00) Dollars.

Parties desiring to purchase said Bonds must submit sealed bids to the said Town of Lamar, which must be filed with the Town Clerk not later than twelve o'clock, April 3rd, 1923. All bids must be accompanied by certified check for One Thousand (\$1000.00) Dollars as a guaranty of good faith. The Town reserves the right to reject any or all bids. No bid for less than par will be considered. Bonds are to be serial bonds maturing in thirty years, bearing interest at six (6%) per cent, payable semi-annually. For further information write E. H. Pate, Clerk of the Town of Lamar.

H. H. ROGERS, Intendant.
E. H. PATE, Town Clerk.

March 19, 1923.

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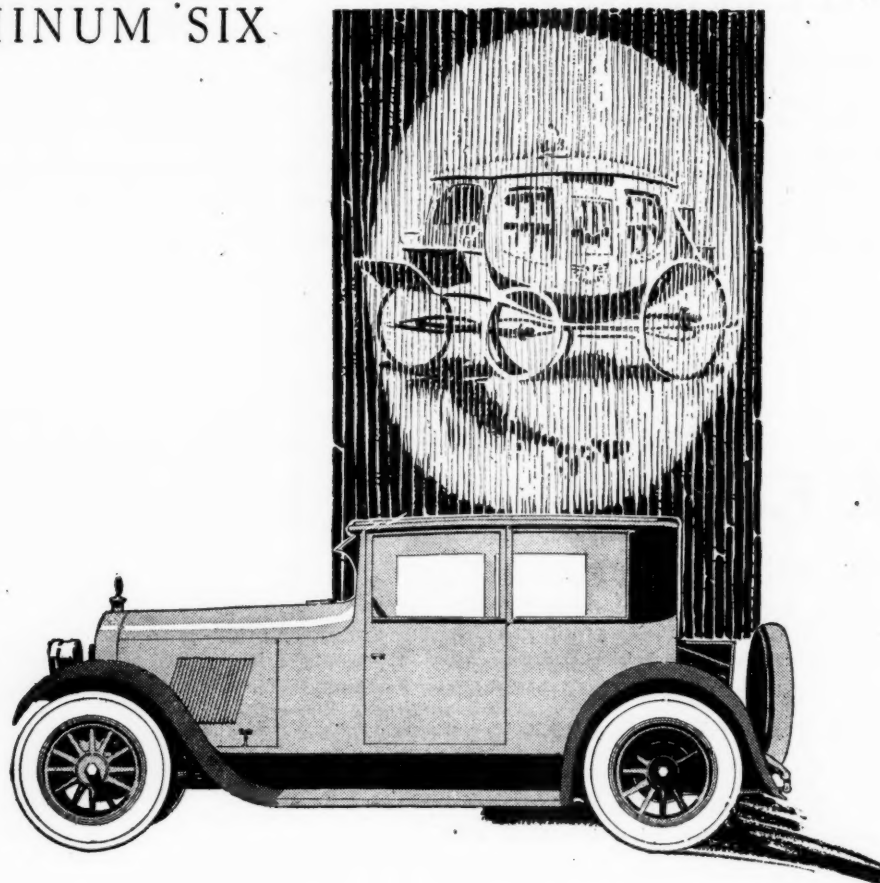
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Equipped with everything, even a foot dimmer for headlights.

SPECIFICATIONS:

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Touring Car \$1195

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f. o. b. Rock Hill, S. C.

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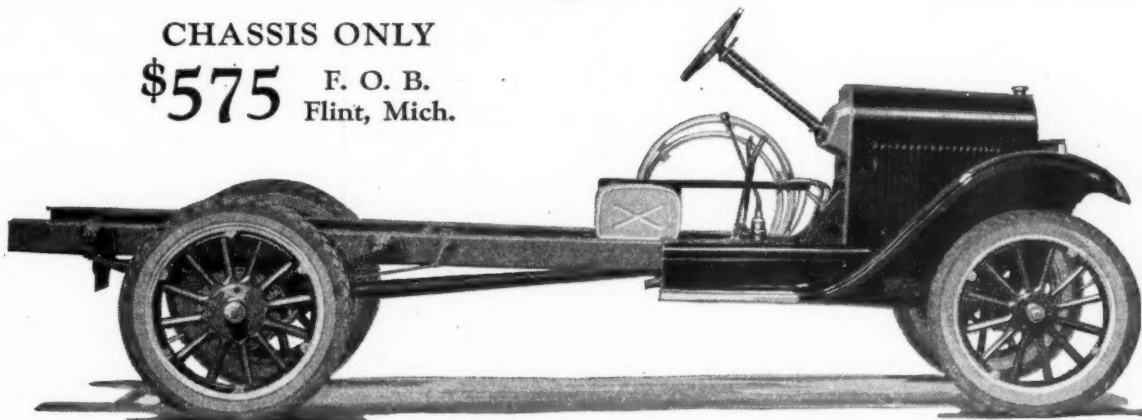
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Utility Express is the lowest-priced quality truck in the world capable of fast heavy-duty service. It hauls your heavy loads quickly and economically. It is reliable.

Long grades and deep mud are mastered by it without racing the motor or boiling the water because the 3-speed transmission provides correct gear ratios to meet any condition of load or road.

You get fast heavy-duty service at the lowest operating and maintenance cost with this truck. It leads in high mileage on gasoline, oil and tires, living up fully to the Chevrolet reputation for unequalled economy.

Ample power for all your work is supplied by the famous Chevrolet valve-in-head motor. Full motor power always reaches the transmission through the positive cone clutch. With the 3-speed transmission you can run the motor at the most economical speed under all conditions.

The staunch rear axle stands up under long-continued hard service. Silent, frictionless operation is insured by spiral bevel gears, ball bearings and roller bearings. Both speed and pulling power in high are obtained with the gear ratio of 5 3-7 to 1.

The sturdy 5-inch channel frame is designed to take standard truck bodies. You can get the exact type of body to suit your work from commercial body builders, located at chief distributing points.

Important Specifications

Full electrical equipment, standard 3-speed transmission, heavy duty spiral bevel gear rear axle, adjustable cone clutch, foot and hand brakes, pneumatic tires, front 31 x 4 clincher, rear 34 x 4 1/2 straight side cord, extra rim for each, extra size radiator, water pump, splash and pressure lubrication, 120 inch wheelbase.

CHEVROLET MOTOR COMPANY, DETROIT, MICH.

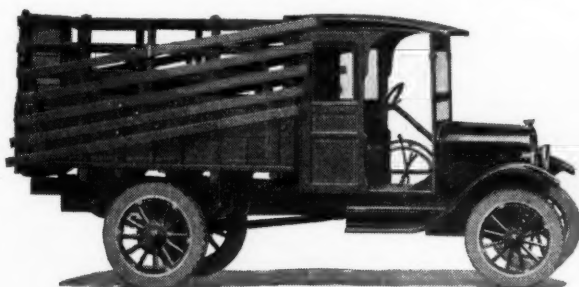
Division of General Motors Corporation

Prices
F. O. B.
Flint, Mich.

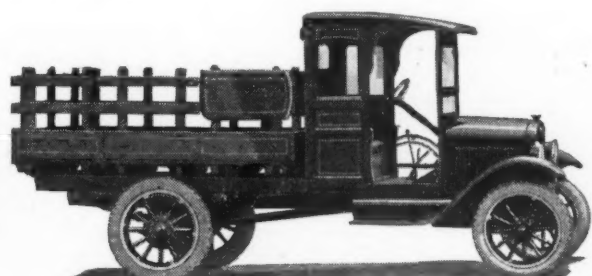
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A Type of Body for Hauling Stock



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PROPOSALS

BOND ISSUES
BUILDINGS
PAVING
GOOD ROADS

Bids close April 3, 1923.

PROPOSALS FOR MANILA ROPE.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn.—Sealed proposals will be received here until 11 a. m., April 3, 1923, and then opened, for furnishing and delivering approximately 103,000 pounds Manila Rope. Further information on application.

Bids close April 20, 1923.

UNITED STATES ENGINEER OFFICE, FLORENCE, ALA.—Sealed Proposals will be received here until 11 a. m., April 20, 1923, and then opened, for furnishing and delivering six sets of cylinder valves, operating mechanism for the same, etc., for the navigation lock of Wilson Dam. Further information on application.

Bids close April 27, 1923.

UNITED STATES ENGINEER OFFICE, FLORENCE, ALABAMA. Sealed proposals will be received here until 11 a. m., April 27, 1923 and then opened, for furnishing and installing four steam boilers, with fittings, stacks, etc., on U. S. towboat Gen. John Coffee, at Florence, Ala. Further information on application.

Bids close April 3, 1923.

UNITED STATES ENGINEER OFFICE, FLORENCE, ALA.—Sealed proposals will be received here until 11:00 A. M., April 3, 1923, and then opened, for furnishing head-gate track, screen track, seat castings, vent-outlet castings, together with bell-mouth castings, etc., for the power house section of Wilson Dam. Further information on application.

Bids close April 10, 1923.

Street Paving

Newton, N. C.

Sealed proposals will be received by the Town Board of Aldermen of Newton, North Carolina, at the office of Clarence Clapp, Clerk, until 2:00 P. M. Tuesday, April 10th, 1923, for paving and otherwise improving certain streets, at which time all bids will be opened and read publicly.

The work to consist of the following approximate quantities:

- 6,343 Cubic Yards of Excavation.
- 18,601 Lin. Ft. Standard Combined Concrete Curb and Gutter.
- 25,000 Square Yards Concrete Base Course and
- 25,000 Square Yards Sheet Asphalt, Bitulithic, Rock Asphalt or Bituminous Concrete Surface Course or
- 30,000 Square Yards One Course Plain Cement Concrete Pavement with Integral Curb.
- 300 Lineal Feet 12" D. S. T. C. Storm Sewers.
- 2,000 Lineal Feet 15" D. S. T. C. Storm Sewers.
- 100 Lineal Feet 24" D. S. T. C. Storm Sewers.
- 29 Street Inlets or Catch Basins.
- 3 Standard Manholes.

All bids must be upon blank forms provided in the proposal and Contract forms furnished with the Specifications.

Plans and Specifications will be on file at the offices of the Town Clerk, Newton, North Carolina, and at the offices of the Engineers in Charlotte, North Carolina, after April 3rd, 1923. Specifications can be obtained from the Engineers.

A deposit of \$10.00 will be required by the Engineers for each set of Plans and Specifications, which deposit will be refunded to bona fide bidders upon the return of the Plans and Specifications in good condition.

Each bid must be accompanied by a properly certified check or bid bond for five thousand (\$5000) dollars, made payable to Sid J. Smyre, Mayor.

The right is reserved to reject any or all bids or to accept such bid as may be deemed advisable by the Town authorities.

SID J. SMYRE, Mayor.
CLARENCE CLAPP, Clerk.

MEES & MEES,
Consulting Engineers,
Charlotte, N. C.

Bids close April 5, 1923.

Road Improvement

SUMTER COUNTY PERMANENT ROAD COMMISSION.

Sumter, S. C.

Notice is given that sealed proposals will be received by the Sumter County Permanent Road Commission at the City Council Chamber in Sumter, S. C., until 10 o'clock A. M. Thursday, April 5th, 1923 for grading, drainage structures and several types of Hard Surface Pavement on the following roads:

- Oswego Road7.89 miles
- Wedgfield Road9.74 "
- Pocahontas Road4.13 "

Bids on each road must be accompanied by bidders' bond or certified check for \$2000. If the work is bid on as a whole, a check for \$4000 must be submitted.

Plans for the work may be seen at the office of the Engineers, Lee, Pennell & Murray, Sumter, S. C. Specifications and proposal forms may be obtained from the engineers upon request accompanied by a check for \$5 which sum will be refunded if same are returned within thirty days after receipt of bids.

The right is reserved to reject any or all bids and to waive all technicalities.

SUMTER COUNTY PERMANENT ROAD COMMISSION.

Sumter, South Carolina.

LEE, PENNELL & MURRAY,
Engineers,
Sumter, South Carolina.

Bids close April 10, 1923.

Concrete Highways

STATE OF MARYLAND
STATE ROADS COMMISSION

NOTICE TO CONTRACTORS

Baltimore, Md.

SEALED PROPOSALS for building seven sections of State Highway, as follows:

- Frederick Co. Cont. F-63. One section of State Highway from Emmitsburg west to the Panna. State Line, a distance of 1.16 miles. (Concrete.)
- Howard Co. Cont. HO-23. One section of State Highway from the end of the Folly Quarter Road to the Triadelphia Pike, a distance of 1.45 miles. (Concrete.)
- Prince George's Co. Cont. P-44. One section of State Highway between Laurel and the Montgomery County Line, a distance of 0.7 mile. (Concrete.)
- Caroline Co. CO-32. One section of State Highway from Hillsboro toward Denton, for a distance of 1.45 miles. (Concrete.)
- Dorchester Co. Cont. D-31. One section of State Highway between Cambridge and Lloyds, for a distance of 1.0 mile. (Concrete.)

- Somerset Co. Cont. S-17. One section of State Highway between Princess Anne and Deals Island, for a distance of 3.0 miles. (Concrete.)
- Queen Anne's Co. Cont. Q-25. One section of State Highway between Chester and the Kent Narrows, for a distance of 1.08 miles. (Concrete.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 10th day of April, 1923, at which time and place they will be publicly opened and read. Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of \$1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred (\$500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 21st day of March, 1923.

JOHN N. MACKALL, Chairman.
L. H. STEUART, Secretary.

Bids close April 10, 1923.

Street Paving

Easley, S. C.

Sealed proposals will be received by the Paving Commission and the Town Council of Easley, S. C., at the Town Hall, two o'clock, P. M., April 10, 1923, for the furnishing of all labor, materials and equipment necessary for paving of certain streets and the laying of sidewalks.

The approximate amount of work to be done is as follows:

- 25,200 square yards hard surface pavement
- 17,700 lineal feet of combination curb and gutter
- 4 000 square yards of sidewalk
- 8,000 cubic yards grading

Proposals must be submitted on the forms which may be obtained at the office of the Town Clerk in Easley or the Engineer's office in Spartanburg. Plans may be seen at both places.

Each proposal must be accompanied by a cashier's check on a South Carolina Bank, for \$1000 made payable to the Treasurer of Easley as evidence of good faith.

The right is reserved to reject any or all bids.

A. B. TAYLOR,

Chairman Paving Commission.
HARWOOD BEEBE, Engineer,
Spartanburg, S. C.

Bids close April 4, 1923.

Road Improvements

OFFICE OF THE STATE ROAD DEPARTMENT.

Tallahassee, Fla., March 14, 1923.

Sealed proposals will be received at this office up to 12 o'clock M. on the 4th day of April, 1923 for the construction or improving of the following sections of roads:—

Project No. 546, being a portion of Road No. 4 in Brevard County, from Sharpes North towards Titusville, a distance of approximately 5.0 miles. Work to consist of the construction of rock base and the necessary drainage structures.

Project No. 554, being a portion of Road No. 4 in Brevard County, from Bonaventure South towards Eau Gallie, a distance of approximately 5.0 miles. Work to consist of the construction of rock base and the necessary drainage structures.

Project No. 507, being a portion of road No. 4 in Flagler County, from Bunnell to asphalt road in Volusia County, a distance of approximately 10.0 miles. Work to consist of the construction of the necessary drainage structures and rock base.

All work to be done in accordance with plans and specifications of the State Road Department.

A certified check or bidder's bond in the sum set forth for each project made payable to the Chairman of the State Road Department must accompany each proposal.

- Project No. 546..... \$6,000.00
- Project No. 554..... \$6,000.00
- Project No. 507..... \$10,000.00

Plans and Specifications are on file at this office and at the office of the Division Engineer, Fort Pierce, Fla., for Projects 546 and 554. For Project 507 they are on file at the office of the Division Engineer, Ocala, Fla. They can be secured upon application to this office for the sum of Five Dollars.

An Engineer of the Department will be at the office of the County Clerk, Titusville, Fla., for the purpose of showing prospective bidders over the work on projects 546 and 554, Mar. 27, 1923, and at Bunnell Mar. 28th for Project 507.

The right is reserved to reject any and all bids.

H. B. PHILIPS,

W. F. COCKE,
State Highway Engineer.

Bids close April 21, 1923.

Road Improvement

Shreveport, La.

Bids will be received by Caddo Parish, Shreveport, La. until 10 A. M., April 21st, for about 8 miles of paved road, concrete, rock asphalt, asphaltic concrete or other suitable type of paving. The right is reserved to reject any or all bids. Full information may be obtained from J. T. BULLEN, Parish Engineer.

Bids close April 23, 1923.

Grading, Draining and Paving

Sanford, Fla.
Sealed proposals will be received by the City Commission of Sanford, Florida at their office in the City Hall, at or before 3 P. M. April 23, 1923 for grading, draining and paving the following streets, to wit:

Second Street from Oak to French	3635 sq. yds.
Third Street from Sanford to Magnolia and from Oak to Avocado	10371 " "
Avocado Avenue from First St. to Third St.	1168 " "
Fifth Street from Magnolia to Myrtle	2229 " "
Ninth Street from Cypress to Park	2732 " "
Thirteenth Street from Sanford to French	6679 " "
Central Street from Sanford to French	6357 " "
Palmetto Avenue from Central to Hughey	1493 " "
Palmetto Avenue from Commercial St. to Lake Monroe	1935 " "
Oak Avenue from Tenth St. to Thirteenth St.	3454 " "
Laurel Avenue from Sixth St. to Thirteenth St.	4460 " "

Bids will be received on the following types of pavement, Sheet Asphalt, Asphalt Concrete, Asphalt Block and Vitri-fied Brick.

Proposal to be presented in a sealed envelope, endorsed on the outside "Bid for Paving," Sanford, Florida, and the name of the bidder or bidders.

Each proposal must be accompanied by a certified check, made payable at sight, to the order of the City Auditor and Clerk, of Sanford, Florida, for 3 per cent of the amount of their bid.

The successful bidder or bidders will be required to give a bond equal to 50 per cent of his or their bid, and such bond to be executed by a surety company licensed to do business in the State of Florida, said bond to be approved by the City Commission.

Copies of the plans and specifications may be seen at the office of the City Manager, or at the office of Fred T. Williams, Engineer. Specifications may be obtained at either office on deposit of \$10.00 which will be returned if a bid is made.

The City Commissioners reserve the right to reject any, or all bids, or to accept any bid they deem to be for the best interest of the City.

W. B. WILLIAMS, City Manager.

Bids close April 4, 1923.

Highway Paving

Durham, N. C.
Sealed proposals will be received for the materials and labor in connection with the improvement of the New Hope Valley Road by the County Commissioners of Durham County, North Carolina in their offices at the Court House until two (2:00) P. M. of Tuesday, April 4, 1923, when they will be opened and publicly read.

The improvement will begin at the corporate limits of the City of Durham and extend to the junction with the hard surfaced Chapel Hill Road.

The specifications cover bituminous macadam, asphaltic concrete and cement concrete pavements. Work contemplated will also include a small amount of clearing, grubbing, grading and the necessary storm drains.

Bids are invited upon approximately 32,500 square yards of pavement with alternative bids upon 65,000 square yards. The pavement will be constructed of one or more of the classes mentioned above as may be selected by the commissioners.

Plans and specifications may be examined at the office of the Engineer. Specifications may be obtained by prospective bidders by addressing the Engineer at Winston-Salem, N. C. and making a deposit of \$10.00, which deposit will be refunded upon the return of the specifications in good conditions. A representative of the Engineer is now on the ground and will show prospective bidders over the work.

Each proposal must be accompanied by a certified check in the sum of five (5%) per cent of the amount bid.

The County Commissioners reserve the right to reject any and all bids or accept any that is thought to be to the best interests of the County.

H. L. CARVER, Chairman,
Board of County Commissioners.
J. D. SPINKS, Engineer,
Winston-Salem, N. C.

Bids close April 13, 1923.

Clearing of Right-of-Way.

Fayette, Ala.
Sealed proposals for clearing the Right of Way of the Main Canal and Laterals of The Fayette and Lamar County Drainage District No. 1, will be received by the Board of Drainage Commissioners up to 12 o'clock, Noon, on the 13th day of April, 1923 at the Courthouse in Fayette, Fayette County, Alabama.

The work to be done consists of clearing approximately 50 miles of Right of Way for the Main canal and laterals, embracing approximately 800 acres.

Plans and specifications will call for the work to be begun within one month from date of letting of contract and to be completed from 3 to 5 miles ahead of the dredge.

A certified or cashier's check in the sum of \$500.00 must accompany each bid for the whole contract, and no bid for less than the whole contract considered, made payable to the Board of Drainage Commissioners of The Fayette and Lamar County Drainage District No. 1, as an evidence of good faith. Checks of unsuccessful bidders will be returned.

All bids must be in sealed envelopes and plainly marked, "Bids for Clearing Right of Way, Main Canal and Laterals," and addressed to Marion L. Coons, Secretary, Board of Drainage Commissioners, Fayette, Alabama.

Plans and specifications are on file at the office of the Judge of Probate of Fayette County, Alabama, or may be obtained from Guy A. Hart, Superintendent of Construction, Fayette, Alabama.

The Board of Commissioners reserves the right to reject any and all bids.

WM. M. SUDDUTH, Chairman.
MARION L. COONS, Secretary.

Bids close April 5, 1923.

Street Paving

Leaksville, N. C.
The Mayor and Board of Aldermen of the Town of Leaksville, N. C. will receive sealed proposals at the City Office, until 8 P. M. April 5th, 1923, for furnishing all labor and material and Paving certain streets in the Town of Leaksville, N. C. in Paving District— and described in the specification hereunto attached.

The quantities given are approximately only assumed for the purpose of comparing bids, these quantities may be increased or diminished within reasonable limits at the option of the town.

All Asphalt or Bituminous from whatever source they may comply with the requirements of the American Society of Municipal Improvements, and said requirements shall be a part of these Specifications.

Bids must be addressed to B. S. Jones, Mayor, Leaksville, N. C. endorsed "Proposal for Paving" and must be received not later than the hour stated above, and no bid can be withdrawn after that hour. Price must be written both in words and figures.

Each bid must be accompanied by a certified check for \$2000.00 as a guarantee that within one week after notice of award the successful bidder will enter into the contract proposed. The check to be made to B. S. Jones, Mayor.

The check of the unsuccessful bidder will be returned as soon as the contract is awarded. The checks of the successful bidders will be retained until a bond for 25 per cent of the amount of the contract has been executed and filed.

When Contractors bid on several kinds of pavement only one check will be required.

The right is reserved to reject any or all bids.

APPROXIMATE QUANTITIES

44,000 Sq. yds. Bitulithic, Sheet Asphalt or Asphaltic Concrete Paving on 4 and 5 inch concrete base.
30,000 Lin. ft. Granite curb, 5" x 18" straight (Optional).
2,000 Lin. ft. Granite curb, 5" x 18" Circular (Optional).
140 Lin. ft. 3 x 3 ft. Concrete Culvert, 1-2-4 Mix.
150 Lin. ft. 6 x 6 ft. Concrete Culvert 1-2-4 Mix.
250 Lin. ft. Storm Sewer, Concrete Pipe 18".
24 Storm Water Inlets, Brick, Complete with cast iron Grate and Curb Plate.
125 Lin. ft. 24" Storm Sewer, Concrete Pipe Reinforced.
30,000 Cu. yds. Excavation.

30,000 Lin. ft. Combined Concrete Curb and Gutter, 1-2-4 Mix.
300 Cu. yds. Solid Rock Excavation.
10,000 Sq. Yds. 4 and 5 foot width Concrete sidewalks.
30 Cu. yds. 1-3-5 Concrete placed in forms.

Laying 400 4" C. L. House Sewer Connections, excavating and backfilling (Town to Furnish Material).

Laying 400 Water connections, excavating and backfilling (Town to Furnish Material).

Plans and specifications will be on file and may be seen at the Office of the Mayor or the Resident Engineer at Leaksville, N. C., March 20th, 1923.

B. S. JONES, Mayor.
J. W. NORMAN, City Clerk.
WEBB & COLE, Engineers.

Webb & Cole Engineers,
Salisbury, N. C.

Bids close April 3, 1923.

Hauling Stone Chips

STATE OF MARYLAND
STATE ROADS COMMISSION
NOTICE TO CONTRACTORS

Baltimore, Md.

SEALED PROPOSALS for hauling approx. 16,463 tons of stone chips in three districts as follows:

District No. 3—Montgomery and Prince George's Counties.....	3245 tons
District No. 5—Carroll, Howard, Frederick and Montgomery Counties	8640 tons
District No. 6—Allegany, Frederick, Garrett and Washington Counties	4578 tons

16,463 tons

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 3rd day of April, 1923, at which time and place they will be publicly opened and read.

Bids must be made in letter form. Blue prints showing details, furnished by this Commission upon request.

No bid will be received unless accompanied by a certified check for the sum of One Hundred (\$100.00) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 19th day of March, 1923.

JOHN N. MACKALL, Chairman.
L. H. STEUART, Secretary.

Bids close April 3, 1923.

Water-works and Sewers

Davidson, N. C.
Sealed proposals will be received by the Town Board of Aldermen of Davidson, North Carolina at the office of C. H. Hamilton, Mayor, until 2:00 P. M., Tuesday, April 3, 1923, for furnishing certain construction materials, at which time and place all bids will be publicly opened and read.

The bill of materials will include approximately:

200 Tons of B. & S. Class B 6 in. Cast Iron Pipe.
20 Tons of B. & S. Class B 8 in. Cast Iron Pipe.
10 Tons of specials.
Necessary Pumping Equipment:
9,000 lbs. of Pig Lead.
15,000 Feet of 8 in. Terra Cotta Sewer Pipe.
4,000 Feet of 10 in. Terra Cotta Sewer Pipe.
3500 Bbls. Portland Cement.
1—100,000 gallon Elevated Steel Water Tank.
15—Gate Valves.
40—Fire Hydrants.

Specifications will be on file at the office of C. H. Hamilton, Mayor, Davidson, N. C., and at the office of the Engineers in Charlotte, N. C.

The right is reserved to reject any or all bids.
C. H. HAMILTON, Mayor,
Davidson, N. C.
MEES & MEES,
Consulting Engineers,
Charlotte, N. C.

Bids close April 9, 1923.

Road Construction

Starkville, Miss.

Sealed bids will be received on Monday, April 9, 1923 until 1:30 o'clock P. M., for approximately 8 miles of road construction.

Plans, specifications, etc., of the work to be done are on file in the office of the Chancery Clerk of Oktibbeha County, Miss. Said contract to be let on a unit basis and will be let to the lowest bidder, the right being hereby reserved to reject any and all bids.

Certified check on a National or some bank in the State of Mississippi for \$1000, must accompany each bid

H. W. DANIEL,
J. S. JACKSON,
C. E. MORGAN,

Highway Commissioners of Supervisors District No. 4, Oktibbeha County, Miss.

Bids close April 18, 1923.

Mechanical Filter Plant

Richmond, Va.

Sealed proposals for the construction of a mechanical filter plant, consisting of Sub-structures, Contract No. 1; Equipment, Contract No. 2; and Superstructures, Contract No. 3, will be received at the office of the Director of Public Utilities, City Hall, Richmond, Va., until 12 o'clock, noon of Wednesday, April 18, 1923; and at that time publicly opened and read.

Contract No. 1 includes about 9500 cu. yds. of reinforced concrete masonry and about 13,000 cu. yds. of excavation in connection with the construction of 10 filter tanks, a basin beneath them, two coagulating basins and other appurtenant work.

Contract No. 2 includes about 200 tons of cast-iron pipe and specials, over 60 gate valves and sluice gates, filter sand and gravel, and all filter equipment for a 30-million-gallon filter plant. It also includes six electrically-driven centrifugal pumps.

Contract No. 3 includes brick superstructures for the plant, comprising a one-story filter building about 110 ft. by 150 ft., and a two-story head house about 50 ft. by 125 ft.

Copies of plans, specifications and forms of proposal covering all three contracts may be obtained at the office of the Department of Public Utilities, City Hall, Richmond, or at the office of Fuller and McClintock, Engineers, 170 Broadway, New

York, on or after March 26, upon deposit of \$25.00 for each set of plans and specifications furnished.

Certified checks are required in the sum of \$15,000 for Contract No. 1, \$10,000 for Contract No. 2 and \$5000 for Contract No. 3.

The right is reserved to reject any or all bids.

E. W. TRAFFORD,
Director of Public Utilities.

Bids close April 17, 1923.

Water-Works and Electric Light Plant

Plaquemine, La.

Sealed proposals will be received by the Mayor and Board of Selectmen, of the Town of Plaquemine, Louisiana, at their regular meeting place until 10 o'clock A. M. April 17th., 1923 for the following:

Three Crude Oil Engines, directly connected to Alternators, Motor-driven Centrifugal Fire Pumps, Motor-driven Domestic Service Pumps, Motor-driven Air Compressors, Switchboard, Deep Well, 200,000 Gallon Concrete Reservoir, Concrete Foundations, Cast Iron Pipe, Hydrants, etc.

Proposals must be marked, "Proposals for Light and Water-works improvements."

All bids must be upon blank forms provided in the specifications.

Each bid must be accompanied by a certified check (Bidder's Bond not acceptable) for five per cent (5%) of the amount bid, but not less than (Fifty dollars (\$50.00)) as evidence of good faith.

Plans and specifications will be on file at the office of the Town Clerk, Plaquemine, La., and at the office of the ENGINEERS in New Orleans, La. Copies of the specifications, form of proposal, etc., may be obtained from the ENGINEERS, SWANSON-McGRAW, INC., New Orleans, La., by depositing fifteen dollars (\$15.00), which amount will be refunded to bona fide bidders, or if the specifications are returned to the ENGINEERS before the date of letting.

The right is reserved to reject any or all bids.

FRITZ WILBERT, Mayor.
L. B. LeBLANC, Clerk.

ENGINEERS:
SWANSON-McGRAW, INC.,
705 United Fruit Bldg.,
New Orleans, La.

Water-Works and Sewerage Franchise

Cocoa, Fla.

Cocoa, Florida, estimated population 2000 will entertain proposition of giving waterworks and sewerage franchise to responsible corporation or individual. Correspondence invited.

C. R. COPELAND, Mayor.

Bids close May 9, 1923.

Remodeling Edgecombe County Jail

Tarboro, N. C.

Sealed proposals will be received by the Board of County Commissioners Edgecombe County, Tarboro, N. C. in the County Commissioners office in the Court House on 9th day of May, 1923 at eleven o'clock A. M. for alterations and additions of Edgecombe County Jail, Tarboro, N. C.

The work will be completed under two separate contracts as follows: General construction including mason, carpenter, plumbing, heating, electric wiring.

Steel jail work including cell plumbing fixtures.

Contractors may procure a set of the plans and specifications upon written request to Mr. J. A. Weddell, County Auditor, Tarboro, N. C., accompanying said request with certified check for \$15.00 made payable to the order of J. A. Weddell, County Auditor, Tarboro, N. C.

Each bid must be accompanied by certified check made payable to the order of J. A. Weddell, County Auditor for 10% of the amount of the bid, as a guarantee for the faithful compliance with the bid to indemnify the said County against any loss.

The successful bidder will be required to furnish bond to the County of Edgecombe in the full amount of the contract as provided by Law. Each bidder must strictly comply with all requirements for a regular bid as directed or required by this notice and specifications.

Notice is hereby given all bidders that if their bids are informal, defective or irregular the same will be immediately rejected.

The Board of County Commissioners reserve the right to reject any or all bids received.

BOARD OF COUNTY COMMISSIONERS,
Edgecombe County,
Tarboro, N. C.

**MINERAL AND TIMBER LANDS WATER POWERS, MISCELLANEOUS PROPERTIES**

Wealth in virgin coal fields in Northern Alabama, near Tennessee River. Ready to mine with electric equipment; entries driven. Superior domestic, steam and gas coal; unsurpassed in the South as an export coal. Iron ore, fire-clay, cement rock and limestone in vast quantities. Five million feet of Poplar Oak and Hickory timber on property. Industrial railroad connecting with Southern Ry. system. Soil overlying 16,000 acres ideal for cattle, sheep and Angora goats and for fruit raising. For full particulars, price and terms, write F. D. Pierce, 1505 E. Genessee St., Syracuse, N. Y.

FOR SALE OR LEASE—The mineral and mining rights in 200 acres containing by estimate two million tons of brown phosphate rock running 65% to 75%, one mile from L. & N. R. R. and 40 miles from Muscle Shoals. Government expert has examined and pronounced this ore superior for briquetting and new furnace process. A fine location for Ground Rock Plant. A most attractive price for investment or lease. Investigation invited. Dr. C. A. Abernathy, Pulaski, Tenn.

COAL LANDS AND MINES

FOR SALE—Going coal mines—coal, oil and gas lands—timber tracts. Reports made on same anywhere. E. H. Morris, Box 518, Charleston, W. Va.

COAL LANDS AND MINES

FOR SALE. 480 acres of strip coal land near Pittsburg, Kansas, including steam shovel, loader and complete stripping equipment. W. N. HUGHES, Jr., Rock-hill Manor, Kansas City, Missouri.

WATER POWER

A never-failing water power. About 250 horse power all year around; on three railroads and about 200 feet from station; situated in Warren County, New Jersey. Included in this property are 40 acres of land, three good dwellings, barn, etc. The stream does not get muddy after a shower. This is an excellent site for chemical works, paper mill, paint mill or other manufacturing purposes, and must be seen to be appreciated. For particulars address Wolff Bros., Paterson, New Jersey.

TIMBER AND TIMBER LANDS

FOR SALE—24,900 acres Virgin Long Leaf Pine in central Florida \$9.50 acre in fee. Estimated 500 boxes acre and 2300 feet timber Pine agricultural land when cleared. 10,250 acres Eastern South Carolina. Estimated 53,000,000 feet original growth Pine and Cypress timber. \$17.50 acre in fee. Easy terms. J. E. Barrett, Carrsville, Va.

BLACK WALNUT LOGS.

Who wants two cars of
BLACK WALNUT LOGS.
write **BONA LUMBER COMPANY,**
San Augustine, Tex.

FARM AND TIMBER LAND

FLORIDA—Timber, Colonization and Fruitland tracts any size; best in Florida. MAUREL & COMPANY, Orlando, Fla.

FARM, FRUIT, AND TRUCK LANDS**FLORIDA**

FLORIDA—National Statistics show that FLORIDA is developing faster than any other State in the Union. It is indeed a land of great resources and opportunities—the playground of the Rich; the Paradise of the Poor. Come and be one of us. We have a Home, Grove or Farm for you. Send for booklet "Largest Orange Tree in the World." Tampa-West Coast Realty Co., (Inc.), Opposite Post Office, "Since Before the War," Tampa, Fla.

FOR SALE—480 acres, 7 room dwelling, 2 tenant houses, 280 in cultivation balance in Virgin Yellow pine timber; will cut five hundred thousand feet lumber. Lands all elevated and fertile, under American wire fence, watered by deep wells and wind mill; A. C. L. R. R. and Highway run through the land, church and school near also, daily mail and phone. Twenty five dollars per acre. Timber and improvements worth considerably more than price asked; can sell 4 good mules and all farm tools, wagons and feed with the place at bargain, and give possession at any time. No better place for general farming stock poultry and fruit. N. H. Green, Branford, Suwanee County, Fla.

FARM, FRUIT, AND TRUCK LANDS

SOUTH CAROLINA

Truck farms that pay dividends annually can be bought at reasonable prices here. Vegetables are shipped eight months in the year. Three and four crops are grown on the same land annually. Excellent climate and health. Plenty of labor; strikes unknown. Well organized association that sells all farm products. For particulars write, Lake Realty Company, Beaufort, S. C.

BUSINESS OPPORTUNITIES

I SPECIALIZE in industrial, warehouse and business sites at and adjacent to Washington, D. C.

M. B. HARLOW,
Harlow Building, Colorado Building,
Alexandria, Va. Washington, D. C.

WANTED: Good reliable parties to help develop the following properties in Macon County, N. C., to wit: Asbestos, Soapstone, Mica, Kaoline and Feldspar. W. B. McGuire, Franklin, N. C.

FIREPROOF and insulating building products can be made from sawdust and waste wood, waste paper, cinders, etc. by my process. Product time tested and results can be guaranteed, it is cheap and the equipment is cheap and simple, suitable for brick, blocks, partition tile, roof decking, stucco backing and cold storage insulation. For samples and particulars address E. R. Stowell, Portland, Indiana.

BUSINESS CONNECTIONS: Do you want immediate connections with right party to handle your deal? We are not brokers or agents—just know right people who will handle your proposition whether business, patent, bond or stock, if worthy. Write for particulars. National Business Connections Bureau, 173 Broadway, New York.

COLLECTIONS

"Send your past due accounts to us for collection. Commission basis. Correspondents everywhere. Herbert Co., Rand-McNally Building, Chicago, Ill.

FINANCIAL

Valuable text books on the "Money Question". The most vital question affecting the welfare of the people—"Daniel on Real Money". New edition being published. "High Cost of Living, Cause-Remedy." 75c. "The Betrayal of the People in the Federal Reserve Act." 25c. The Real Issue—Democracy vs. Plutocracy." 25c. No Plutocratic Peace But a Democratic Victor." 20c. The Monetary Educational Bureau, Kellogg Building, Washington, D. C.

WE WANT to make loan connection with first class Insurance or Trust Co. for Greenville, South Carolina and vicinity.

Reference gladly furnished.

Greenville Real Estate Loan & Ins. Co.
W. B. ANTHONY, Sec'y. Treas.

CAPITAL WANTED

CONTRACTOR—With ten years executive experience in contracting business desires to enlarge operations and offers good proposition to party who is able to furnish from fifty to one hundred thousand dollars capital. Has good going organization operating in central west and can furnish good reference. Address No. 6152 care Manufacturers Record, Baltimore, Md.

HIGH GRADE BONDS

\$100,000 Seven Per Cent First Mortgage (Real Estate) Serial Bonds, maturing four to fifteen years, subject to allotment or prior sale. Opportunity for large investor or institution with clientele of conservative investors. Issue is highly endorsed by local bankers, Chamber of Commerce and County Judge, who has authorized these bonds as legal investments for trust funds in Putnam County, Fla. Appraisal made by Realtors' Association Appraisal Committee. Books audited by Ernst & Ernst. Will stand strict investigation. Palatka Development Co., Palatka, Fla.

FINANCIAL

SOUTHERN MILL STOCKS BANK STOCKS BONDS.

25 years' experience in this Field.
F. C. ABBOTT & CO.,
Charlotte, N. C.

"INCORPORATE any enterprise under common law; any capital, transact business any state; no corporation taxes; no personal liability; keep control; very reasonable. Booklet free. Reinshagen, 2 Rand-McNally Building, Chicago, Ill."

INDUSTRIES WANTED

FREE FACTORY SITES on Belt Line, connecting four trunk line railroads, high tension electric line, two water mains, concrete boulevard.

We own over 4000 acres of land all platted into factory, park, school, church and building sites.

An ideal location for an industrial center, where you can locate your factory and secure cheap building sites for labor.

We will give extraordinary inducements to those who will promote desirable industries.

Write for map showing location, etc.
NANSEMOND INDUSTRIAL CORP.
4 Arcade Bldg., P. O. Box 438
Norfolk, Virginia.

PITTSBURG, KANSAS, in the heart of Kansas coal fields offers reasonable assistance to industries that can stand investigation. Pittsburg population 23,000, county population 65,000, four steam railroads, one electric interurban, annual coal production (tons) 7,500,000, Natural gas, cheap electric power, excellent water and a good place to live. Address Chamber of Commerce.

"INMAN, S. C., wants industries, large and small. Offer cheap power—healthful climate—good labor conditions. Address Inman Chamber of Commerce, Inman, S. C.

TEXTILE MILLS WANTED.

Big inducements to offer mills desiring to locate in the South. Best climate and living conditions—ample native born labor at cheap wages—unlimited hydro-electric power at low rates—best grade North-East Georgia cotton grown in this section.

Inducements will be offered on tax exemptions—good locations on main and branch lines of Southern R. R. are available—full co-operation of citizenship—Toccoa, Georgia has real inducements to offer investors in the cotton mill industry. Write Kiwanis Club of Toccoa, Georgia.

INDUSTRIAL PLANTS

FOR SALE—Textile mill construction building 100x300 ft. with fourteen acres land; two thousand feet railroad siding. Additional acreage obtainable. Good town, mill section of Georgia, native labor plentiful. Will take stock in textile enterprise for payment and can secure additional stock subscriptions. Write or wire, Manget Bros. Co., Newnan, Ga.

MODERN EXCELSIOR PLANT fully equipped. Ample wood supply.
J. M. HARWELL,
Pachuta, Miss.

SOAPSTONE QUARRY. Machinery and Timber For Sale. A complete plant, consisting of engine, boiler, three gang-saws, rubbing, grooving, planing machines, quarry machinery, undercutters, channelling and hoisting machines for quarrying and cutting soapstone. Also timber on 360 acres of ground. Location near Richmond, Virginia. For full particulars address HENRY M. SCHADEWALD, 3rd & Huntingdon, Philadelphia, Pa.

FOR SALE. A modern up to date brick plant completely equipped; large capacity; near Pittsburg, Kansas; includes 130 acres of shale and fire brick clay. W. N. HUGHES, Jr., Rockhill Manor, Kansas City, Missouri.

FOR SALE

"D" Handle and Furniture factory. Building 70 by 100 ft. Two stories high, boiler room, dry kiln, and warehouse. 1500 Maury Street, Houston, Texas.

INDUSTRIAL PLANTS

FOR SALE—ON EASY TERMS
Modern two story brick building 55 by 310 feet regular mill construction, fully sprinkled, large platform and sidetrack facilities for eight or ten cars. Large elevator. Adjoining this building is a single story brick building 50 by 90 feet, with boiler room in one section, balance concrete floor. This is an excellent plant and especially suitable for hosiery or knitting mill, located in best city in North Carolina.
J. E. LATHAM CO. OWNERS
Greensboro, N. C.

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FACTORY SITE

Suitable for Practically Any Line. Will sell as an inducement to increase Laurel's factories. Adjacent to our plant. Will sell sawmill refuse as fuel to cost in our opinion not more than \$2.00 ton coal. Wausau Southern Lumber Co. Laurel, Miss.

WARSAW, NORTH CAROLINA
FACTORY SITES FREE.
IN HEART OF COTTON BELT.
MUNICIPAL TAXES GIVEN FOR TEN YEARS. WATER WORKS, ELECTRIC LIGHTS, GOOD SCHOOLS, GOOD ROADS, PLENTY OF LABOR. EXCELLENT TRANSPORTATION FACILITIES.
FOR FURTHER INFORMATION, WRITE
E. A. PEARSALL, TOWN CLERK.

RICHMOND, VA.

BEST LOCATIONS

For Industrial and Factory Sites.
Sizes Convenient
and on Railroad Sidings
Prices Very Reasonable.
Labor Conditions Excellent.

Write

INDUSTRIAL REALTY CORP.

Care Richmond Trust Co., Richmond, Va.

FOR SALE: Desirable factory site located at Paragould, Arkansas; improvements consist of one story brick factory 255x40 with additions for boiler and engine room and warehouse. Two open frame sheds 100x100. Good power plant and lighting equipment. Railroad sidings Cotton Belt and Iron Mt. Railroads. All in first class repair. Particularly adapted for wood working plant or furniture factory. Address No. 6137 care Manufacturers Record.

JACKSONVILLE, FLORIDA

For sale or Lease, plot 250 by 1200 feet, centrally located on deep water and railroad yards. Exceptional location for factory, warehouse or terminals. Myron L. Howard, Box 1115.

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INVENTORS—Send sketch or model of your invention, for opinion concerning patentable nature, and exact cost of applying for patent. Book, "How to Obtain a Patent" sent free. Gives information on patent procedure and tells what every inventor should know. Established 25 years. Chandler & Chandler, 412 7th St. N.W. Washington, D. C.

PATENTS, TRADE-MARKS AND COPYRIGHTS—Write for our Free Illustrated Guide Book and EVIDENCE OF CONCEPTION BLANK. Send model or sketch and description of your invention for our opinion of its patentable nature free. Highest references. Prompt service. Reasonable terms. Victor J. Evans & Co., 712 9th St., Washington, D. C.

PATENTS—Booklet free. Highest references. Best results. Promptness assured. Watson E. Coleman, Patent Lawyer, 624 F St., Washington, D. C.

PATENT SENSE

"The Book for Inventors and Manufacturers." FREE. WRITE LACEY & LACEY, Dept. 15, Washington, D. C. Est. 1869.

AGENCIES WANTED

MANUFACTURERS AGENT with office in Rochester, N. Y., calling on manufacturers in Rochester and Central New York, desires to represent reputable company in this section. Add. 121 Central Bldg., Rochester, N. Y.

AGENCIES WANTED

WANTED to get in touch with all manufacturing concerns who put out small household utilities and conveniences of every description to be sold by college studying agents. Write Willie W. Varner, P. O. Box 123 Columbia, S. C.

SITUATIONS WANTED

CONSTRUCTION SUPERINTENDENT, at present employed by large Engineering and Construction Co., thoroughly familiar with all classes of concrete and steel construction. Have handled railroad bridge work, concrete and earth dams. Hotels, office and industrial buildings. Estimator, have handled Southern labor for ten years. Will go anywhere. Age thirty-six. references. Address No. 6148 care Manufacturers Record, Baltimore, Md.

We supply best southern Negro labor. No tramps, pick-ups or drifters. Advance orders taken. Our method is rapid, efficient and economical. Parker System Labor Service, 419 E. 42nd, Chicago, Ill.

Superintendent or Asst., age 40 technically trained, 18 years practical field experience in construction, operation, and maintenance of crusher and concentrating plants with power installation—competent in quarry and pit operation, efficient training and organizing of operating crews, available now. A. I. references. Address No. 6133 care Manufacturers Record, Baltimore, Md.

MEN WANTED

SUPERINTENDENT WANTED—A good practical Semi-technical man for local Superintendent for Sulphur-fertilizer plant in Texas. Should be able to lay Service railroad, operate a narrow gauge line with gasoline engine motor, know how to quarry rock, and handle it through the mill which consists in grinding dry in a Hardinge conical mill, and sacking for shipment. Good chance for advancement as business is growing. Address No. 6127 care Manufacturers Record, Baltimore, Md.

MEN WANTED

WANTED: By a large Manufacturing concern experienced draftsman. Should be able to make preliminary sketches for new mill buildings, machinery, shafting and wiring layouts. Should know something of machinery design and be thoroughly conversant with strength of materials, etc. used in connection with same. Position permanent. Location Georgia. Southern man preferred. In answering state experience, and salary expected. Address No. 6150 care of Manufacturers Record.

"SALESMEN. Positions open for one or more men under 30 years of age who have had several years of sales experience. Company well established in strong trade position. Opportunity for advancement to executive position. Knowledge of steel not necessary but proved sales ability essential. Address: Vice President in Charge of Sales, Colonial Steel Co., Pittsburgh, Pa.

WANT EXPERIENCED CEMENT MANUFACTURER who is capable of installing plant and operating same. Prefer one with capital. Must have experience and good reference and connections. Write 308 Ruffner Ave., Chulston, W. Va.

AGENTS WANTED

A national organization desires to get in touch with a man in each large city to act as Sales Agent in the disposal of used machinery. Every assistance will be given. Remuneration on a commission basis. The men selected will have the opportunity of making a substantial income. Must be aggressive and able to visualize unusual uses for equipment. Room 1610, 115 Broadway, New York City.

MANUFACTURERS' AGENTS. — Wanted in every industrial state, acquainted with the trade to sell a high grade complete line of OXY-ACETYLENE WELDING AND CUTTING EQUIPMENT. Address No. 6134 care Manufacturers Record, Baltimore Md.

MEN WANTED

Salaried positions \$2500 to \$25,000 upward; executive, technical, administrative, engineering, manufacturing, professional managing, financial, etc., all lines. If you are qualified, and receptive to tentative offers for a new connection you are invited to communicate in strict confidence with the undersigned, who will conduct preliminary negotiations for such positions. A method is provided through which you may receive overtures in confidence, without jeopardizing present connections, and in a manner conforming strictly to professional ethics. Send name and address only; preliminary particulars will be sent without obligating or compromising you in any way. R. W. Bixby, Inc., 403 Lockwood Building, Buffalo, N. Y.

WANTED: Carpenter Shop Foreman by a large Southern Cotton Mill. Would have to be responsible for the maintenance of mill village houses, also main factory buildings. Would have to install shafting, machinery, etc. Also would have to take care of whatever factory building changes which come up. Southern man preferred. In answering state experience, and salary expected. Address No. 6151 care of Manufacturers Record, Baltimore, Md.

"SALES ENGINEERS" wanted who are calling on power plants and consulting engineers. Must understand combustion to sell high grade combustion control system. Has been in use for nine years with very satisfactory results and is now standard equipment with large service companies and manufacturers suitable for both hand and stoker feed. Liberal commission and territory to those who can qualify." Address No. 6146 care of Manufacturers Record.

MACHINERY AND SUPPLIES WANTED

WANTED: Steel Stack 48 inches by 90 feet—self or guy supported, to be erected on foundation already placed, (present stack to be removed). For detail information address Roanoke Water Works Company, Roanoke, Va.

Free Sites for Manufacturing Plant,
Cotton Mill Preferred

The Chamber of Commerce of Mocksville, Davie County, N. C., offers 10 acres free, 40 acres adjoining at \$50.00 per acre, 150 acres available in suburbs of city on rail road, ideal location. Other sites available for all kinds of enterprises, large or small. Electric power available. Healthy climate. Tax adjustments. Correspondence solicited.

D. H. HENDRICHS Sec'y
Chamber of Commerce, Mocksville, N. C.

WONDERFUL BARGAIN

Factory buildings of brick construction with 7 acres valuable land in city limits of Frederick, Md., Electric lights, city water. R. & O. switch alongside property. Pennsylvania freight station nearby. Can be bought in entirely easy terms at less than value of buildings. Floor space about 20,000 sq. ft.

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Telephone Calvert 4442

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Routings
Rate Adjustments

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Overcharge
Loss or Damage

Activities Confined to Traffic Which Originates in, or Terminates in, or Moves Between Points in, Southern Territory.

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THOS. E. GRADY & CO., Inc.

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WEST PALM BEACH, FLA., American National Bank Bldg.

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The A. & W. P.—W. Ry. of Alabama and Georgia Railroads traverse a territory rich in material and potential resources. Attractive industrial sites. For information apply:

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Spring Merchandise in LOUISVILLE

Far famed for its completeness and diversity in textiles, the Louisville Market in assembling open stocks for Spring has included every minutest detail in furniture, hardware, house-furnishings and other lines to an extent that no other market will excel.

Louisville is one of the larger manufacturing and distributing points for machinery, hardware and agricultural implements, builders' supplies and construction material and has the largest individual hardware plant in the world.

Many merchants are using our "Merchants Information Bureau" to their financial advantage. Tell us what you want and we'll connect you with reliable sources of supply for direct quotation.

MERCHANTS & MANUFACTURERS ASS'N.
INCORPORATED
"Refunds Your Fare From Anywhere"
ROBERT M. KERR Secy.



At a Stated Term of the District Court of the United States for the District of Rhode Island, Held at the City of Providence on the Third day of March, 1923.

PRESENT, HON. ARTHUR L. BROWN, Judge.

AMERICAN & BRITISH SECURITIES CO., Plaintiff, against AMERICAN & BRITISH MFG. CORP., Defendant—Equity No. 131

Geo. C. Van Tuyl, Jr., Ancillary Receiver herein, having duly moved this Court for an order authorizing and directing the sale of the assets of the defendant corporation at public auction, and under the rules and practice of this Court, and said motion having come duly on to be heard before me on this 3rd day of March, 1923, and William Dewey Loucks, Esq., Counsel to the Defendant Corporation, Henry V. Poor, Esq., Counsel for the Committee of Creditors, Messrs. Larkin, Rathbone & Perry, Counsel for the Central Union Trust Company of New York, as Trustee, under a certain trust mortgage, more particularly described in the petition of the Receiver herein, Charles F. Choate, Jr., Counsel for the New Idria Quicksilver Mining Company and G. W. McNear, Inc., mortgages, having received notice of said motion, proof of such notice having been duly filed herein, and Ralph Greenlaw, and Louis H. Strouse, Counsel to the Receiver, having appeared in support thereof.

Now, upon all the pleadings and proceedings heretofore had herein, and upon the petition of the said Ancillary Receiver in Equity, verified the 28th day of February, 1923, and upon motion of Ralph Greenlaw, and Louis H. Strouse, Counsel for said Receiver, it is

Ordered that all of the property, assets and effects except cash and accounts and choses receivable of American & British Manufacturing Corporation, the defendant above named, now in possession or under control of the aforesaid Ancillary Receiver, be sold to the highest bidder at public auction sale, subject, however, to the limitations hereinafter contained:

First: Parcel A. Shall comprise all the land and buildings of the defendant corporation located in the District and State of Rhode Island, and all the right, title and interest of the Receiver and Ancillary Receiver therein, more fully described as follows:

(a) "All that certain tract or parcel of land, with all the work shops, buildings and other improvements thereon, situated in the northerly part of the City of Providence, in the State of Rhode Island, and comprising the manufacturing establishment and plant formerly belonging to the American & British Manufacturing Company, and prior to the Corliss Steam Engine Company, and more particularly bounded and described as follows, to wit: Northerly, partly by land now or formerly of the Rhode Island Tool Company, and partly by West River Street; easterly, partly by said West River Street and partly by Cross, formerly Burt Street; southerly, partly by said Cross Street and partly by Charles Street; westerly by the railroad formerly called and known as the Providence and Worcester Railroad, being the tract or parcel of land designated as Lot Numbered 2, on Assessor's Plot No. 76, in the office of the Assessor of Taxes in the said City of Providence except the portion theretofore conveyed to The New York, New Haven & Hartford Railroad Company, containing three hundred sixty-one thousand, one hundred seventy-eight (361,178) square feet of land, be the same more or less; also

(b) "All that certain tract or parcel of land situated in the southerly and westerly side of Admiral Street, in said City of Providence, and bounded and described as follows, to wit:

"Beginning at a point in the westerly line of Admiral Street, forty (40) feet northerly from the intersection of the northerly line of Chad Brown Street with said westerly line of Admiral Street; thence turning at right angles to said westerly line of Admiral Street and running westerly ninety-eight (98) feet, thence southerly on a line parallel with and ninety-eight (98) feet distant from said westerly line of Admiral Street, forty and one-half (40½) feet to the northerly line of said Chad Brown Street, thence turning and running in a westerly direction, following the said northerly line of said Chad Brown Street, five hundred and two (502) feet; thence turning and running northerly parallel with and six hundred (600) feet distant from said westerly line of Admiral Street, two hundred and forty-three and fourteen one-hundredths (243.14) feet; thence turning at right angles and running six hundred (600) feet till it comes to the westerly line of Admiral Street; thence turning at right angles and running southeasterly in said westerly line of Admiral Street two hundred (200) feet to the point of beginning, and containing three and two hundred and thirty-five thousandths (3.235) acres of land, except so much thereof as has been deeded to the City of Providence for highway purposes; the above two parcels being the same premises heretofore conveyed to the International Power Company by Alfred H. Hoadley, of Providence, Rhode Island, by deed bearing date the 3rd day of May, 1902, and recorded in Providence, Rhode Island, in Records of Deeds, Book 445, page 440, on May 5th, 1902; and being the same premises conveyed to American & British Manufacturing Corporation by American & British Manufacturing Company by deed dated July 1, 1919, and duly recorded in Providence, Rhode Island, in Records of Deeds."

Parcel B. Shall comprise of the heavy or fixed machinery of the defendant corporation located in the plant or factory of the defendant corporation or elsewhere in the State of Rhode Island, including all the right, title and interest of the Receiver and Ancillary Receiver therein.

Parcel C. Shall comprise all the office furniture, tools, equipment and merchandise belonging to defendant corporation located in the plant or factory of the defendant corporation or elsewhere in the State of Rhode Island.

Second: The property shall be sold under the following conditions and in the order named herein, viz.:

(a) It shall be first offered as an entirety and a record shall be kept of the amount of the highest bid so received.

(b) Immediately thereafter bids shall be asked for the land and buildings only as a whole or in parcels, and a record shall be made of the highest bid then received.

(c) Thereupon bids shall be asked for the machinery, equipment and all other personal property in one lot, and a record shall be kept of the highest bid so offered.

(d) And finally the machinery, equipment and all other personal property shall be offered in individual lots, and the said lots to be set out and described at least two weeks in advance of the date of sale; and a record shall be kept of each bid offered for each lot; the lots to be sold in the order of listing.

When all the assets have been offered as defined in (a), (b), (c), (d) a computation shall be immediately made to determine which combination of bids made will yield the highest price to the estate as follows:

If the price offered for the real estate and personalty as an entirety shall exceed the total of the highest bids for the real estate offered separately and the personalty offered separately or in lots it shall be submitted for confirmation.

If the price offered for the real estate and personalty as an entirety shall not exceed the total of the respective bids when offered individually, then the bids offered individually shall be submitted for confirmation subject to the following:

If the aggregate of the bids offered for the individual lots of personalty shall exceed the bid for the personalty in one lot, then the former shall be submitted for confirmation, but not otherwise.

Further ordered that all bids shall be expressly made and accepted by the Auctioneer and the Receiver, conditioned upon the approval of this Court and shall be accompanied by cash or certified cheque for at least ten per cent (10%) of the amount of such bid, drawn upon a Bank or Trust Company acceptable to the Receiver and payable to his order. Deposits received from unsuccessful bidders shall be returned to them upon the final rejection of their bids. The deposit of the successful bidder or bidders may be applied on account of the purchase price, or may be held as security for the performance by the bidder of the terms of his accepted bid, and in the event of his failure to perform in full the terms and conditions of the decree of confirmation, the full amount of the deposit may be declared by the Court forfeited. The balance remaining unpaid on any and all accepted bids, as provided by the Court, shall be paid to the Receiver within five days after the entry of Order of Confirmation without further notice to the successful bidder or bidders. Any bidder may make one or more bids not inconsistent with this order, in the alternative, or otherwise.

Further ordered that the aforesaid property both real and personal be sold free and clear of all liens and demands thereon, including a certain alleged mortgage made by the defendant corporation to the Central Union Trust Company of New York, as Trustee, dated October 1st, 1920; also a certain alleged mortgage bearing date the 18th day of October, 1920; recorded in the Bridgeport Land Records in Book 469 on Page 327, on the 22nd day of October, 1920, unto the New Idria Quicksilver Mining Company, a corporation organized and existing under the laws of the State of Wyoming, and G. W. McNear, Inc., a corporation organized and existing under the laws of the State of California.

Further ordered that the net proceeds arising from the sale of the said property affected by the said alleged mortgages, shall be held by the Receiver herein, and deposited in a Bank or Trust Company in the City of Providence, in this District, and not paid out or distributed except upon further order of the Court, entered after notice to the said alleged mortgages or their attorneys, and the lien of all alleged mortgages shall attach thereto, but without prejudice to or limitation upon such power as this Court may have to order the payment for care, preservation, expenses of sale, taxes and administration expenses therefrom.

Further ordered that the defendant corporation and its proper officers be and they hereby are ordered and directed to make, execute and deliver any and all deeds, conveyances or other written instruments necessary to convey title to any or all of the property of the defendant corporation which may be sold hereunder, and it is further

Ordered that the said Receiver be and he hereby is authorized to receive in his discretion in part payment upon the sale of any of the real estate hereunder named and described in Parcel A. a purchase money mortgage or purchase money mortgages executed in due form from the purchaser, and it is further

Ordered that the said real property and assets of the defendant corporation included in parcels A, B and C, shall be sold at the office or at the premises of the defendant corporation in the City of Providence, in the State of Rhode Island, on Tuesday, the 10th day of April, 1923, at 10 o'clock A. M., on that day, without further notice by the Court.

The publication hereof, shall be made in at least one newspaper in the cities of New York, N. Y., and Providence, Rhode Island, to be selected by the Receiver and also in such trade papers and newspapers and such other cities as they may in their judgment deem advisable, and such publications to occur at least once a week for four successive weeks, and also on the date of the sale.

This order, shall be subject to the approval of the District Court of the United States for the Southern District of New York.

After the bids shall have been received, at such auction sale, the Receiver shall submit such bids, together with his recommendations thereon, to the Court.

The decree of confirmation of sale or sales shall contain appropriate provisions directing the Receiver and the defendant to execute and deliver such instruments and to do such acts as may be necessary to vest in the successful bidder or bidders, or his or their nominees, the respective rights, titles and interests of the Receiver and of the defendant in and to the property and assets purchased by the successful bidder or bidders upon compliance by such bidder or bidders with the terms of the decree of confirmation. Any purchaser may apply to this Court at the time of the said Receiver's report above provided for such further order or orders in connection with the said purchase by him, as may be just and equitable.

This order is without prejudice to any lien which Messrs. Waterman & Greenlaw Attorneys at Law, may have and which shall attach to the proceeds of said sale.

A copy of this order shall be mailed to each known creditor of the defendant at least fourteen (14) days prior to the time of sale.

The amount of any deposit paid by any purchaser, hereunder shall be returned to said purchaser, upon failure of the Receiver to tender marketable title of the Receiver and defendant to the property sold to such purchaser.

ARTHUR L. BROWN,
U. S. D. J.

The said sale is to be conducted by G. L. & H. J. Gross and Joseph Feldstein, licensed auctioneers.



CYLINDERS

An ever increasing number of new cylinders are being distributed from Prest-O-Lite's cylinder factory to meet the constantly enlarging demand for Prest-O-Lite service.

Making cylinders to its own design, guarding every step, Prest-O-Lite knows that each cylinder measures up to its high standard resulting from years of experience in the manufacture and distribution of Dissolved Acetylene.

An inquiry at our nearest sales office will bring you information concerning our latest sales and service plans.

Each Prest-O-Lite user looks to his nearest District Sales Office not merely for arrangements to adequately cover acetylene needs, but for helpful co-operation and advice on any matter involved in the use of acetylene.

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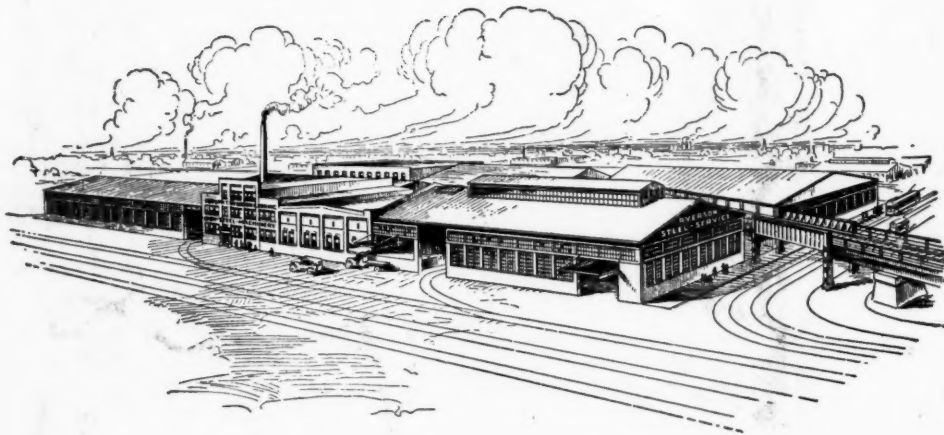
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DISSOLVED ACETYLENE



Ryerson Buys Cincinnati Iron & Steel Co.

Joseph T. Ryerson & Son, Inc., have purchased the plant, stock and good will of the Cincinnati Iron & Steel Company.

This move provides the sixth plant in the Ryerson Steel-Service System, and makes all steel products more quickly available to the large territory served from this point.

JOSEPH T. RYERSON & SON INC.

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